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ABSTRACT

The final report of an 18-month project in University City, Missouri, to develop junior and senior high school components centered on career education, and a guidance and counseling component for both levels is presented. An Alternative High School was established, with students pursuing career education and academic core subjects; career awareness courses were developed for use in the junior high school. Evaluation through process-documentation and analysis of pre- and post-tests found the junior high program generally successful, and the Alternative High School results mixed in their impact. An outlined discussion of the problem area and project goals, objectives, design, procedures, and results are presented. Measurement and analysis of component objectives, and outcomes for students in the Alternative High School are discussed, including case histories of 14 students. A third party evaluator's conclusions and recommendations are summarized, stating that the guidance component was the most effective component in achieving both process and outcome objectives, but that the project was least successful in its primary purpose--student career development. Tables supplement the discussion. Behavioral objectives, course descriptions for the Alternative High School and descriptive data on its student population, curriculum review inventory, and attendance records are appended. (LH)

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1. Cover Page

Final Report

Project No. V261013L
Grant No. OEG-0-72-0809

Career Development Project

Conducted Under
Part C of Public Law 90-576

Joe A. DeWoody (Project Director)
School District of University City
725 Kingsland Avenue
University City, Missouri 63130

October 1, 1973

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2. Title Page

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The project reported herein was performed pursuant to a grant from the Bureau of Adult, Vocational and Technical Education, Office of Education, U.S. Department of Health, Education and Welfare. Grantees undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Joe A. DeWoody (Project Director)
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725 Kingsland Avenue
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5. Summary of the Report.

(a) Time Period. This report covers the period from January, 1972 through June, 1973.

(b) Goals and Objectives. The general goal for the project was to develop a secondary school program, centered around career education and including a heavy emphasis upon guidance and counseling. Toward this end, objectives were set for the senior high and junior high levels.

Senior high objectives called for establishing an Alternative High School, where students would pursue studies blending career education with academic core subjects. Junior high objectives called for the development of career awareness courses or units, for use in the school. Guidance and counseling objectives specified the development and implementation of group guidance programs for both the junior high and senior high students.

(c) Procedures. The Alternative High School was organized as an operational unit in the school system. An enrollment level of 150 students was maintained, and there were ten certificated staff (FTE) as well as part-time aides. Traditional curricula were revised and new courses were developed especially for the school.

Teams of junior high teachers and students prepared written career curricula units and topics on a performance contract basis. Writing teams prepared group counseling programs for the junior high school and the senior high school, also.

(d) Results; Accomplishments. The Alternative High School was formed and implemented substantially along the lines intended, with the important exception of curriculum-wide infusion of career education-related learnings and outside experiences. A primary benefit for most students related to that aspect of career education centering upon life-style and preliminary decision-making. The courses are continuing.

The specified courses at the junior high level were produced and students received appropriate instruction. Several measurable gains resulted. A revised program is underway.

The group counseling courses were produced on schedule and were generally successful. They are being continued.

(e) Evaluation. The program was evaluated through both process-documentation and analysis of pre- and post-tests. For the junior high level, the project was generally successful. Student attitude toward school was measurably more positive and student knowledge about the world of work increased measurably, for some groups.

The guidance and counseling component was generally successful, also. At the senior high level the expressed number of student personal problems decreased measurably. Objectives set for the junior high and guidance and counseling programs were worked toward in a manner consistent with the intentions specified in the design for the project.

The findings for the senior high component (the Alternative High School) were mixed. Student absences decreased measurably, academic performance remained constant or improved, and student personal problems diminished measurably. However, students did not gain in occupational knowledge or in attitudes indicative of career planning. The full career education program designed for the project (self, occupational, and educational awareness) was not delivered to all students.

Process analyses suggested that in the conduct of this component of the project there was a separation between the career education and Alternative School aspects of the program among several staff and most students. However, there was substantial benefit from the program for many students in terms of resolution of problems which had been inhibiting academic and career education progress.

(f) Conclusions and Recommendations. It was concluded that several factors in the organization of the school combined to inhibit program delivery of instruction aimed at specific career-related objectives. The factors included: housing the school in several locations, continual production of a new curriculum each semester, and an unbalanced commitment, directed more to optional education and humanistic inter-action than toward efficiency in delivering goal-directed instruction.

It was recommended that the school be housed in appropriate quarters, student and staff commitment to career education be secured, the curriculum be revised appropriately, and the unsuccessful portions of the program be re-evaluated. These recommendations were implemented in Fall, 1973, and they are being carried forward.

6. Body of the Report.

(a) Problem Area. Cited as a rationale for the program was the fact that a sizable number of secondary students, those who seemed to be academically able as well as those who seemed less capable in the customary sense, were demonstrating little interest in the traditional academic program offered in the secondary schools. Some viewed their educational program as merely irrelevant, while others seemed to be extremely alienated.

Seen also as an element of the problem area was the traditional nature of the secondary curriculum, which appeared geared to the needs of the college-bound student. A greater variety of curriculum approaches to reach individual differences, greater relevance in the curriculum, and increased vocational and technical offerings in the curriculum were documented as serious needs in the District, according to survey data and analyses from professional and lay persons.

(b) Goals and Objectives for the Project. The major goal for the project, developed around the perceived problem area, was to develop in the School District a demonstration and development site where an instructional program organized around career education would be provided for selected secondary school students. As a testing ground for new modes of organization, instructional techniques, and curricula, it was expected that successful elements of the demonstration program could be adopted into the regular practice in the schools. Furthermore, successful experiences could be disseminated to the general educational community.

The objectives for each component are summarized briefly below.

Senior High Component: An Alternative High School will be established in the School District, and an instructional program incorporating career education will be offered. Alternative School students will: increase in knowledge concerning occupations, and they will take part in training or work experiences; feel more positive toward school; improve in attendance; maintain or improve in academic performance; be more highly motivated; and exhibit greater career planfulness.

Junior High Component: Junior high career education courses will be written, and students will enroll in them. Junior high students receiving career education instruction will: increase in knowledge concerning selected aspects of occupations; have a more positive attitude toward school; and they will have a more mature attitude toward career decision-making.

Guidance and Counseling Component: Group counseling programs will be written for the junior high school and the senior high school level, and the programs will be given to students. Junior and senior high school students will: have fewer stated personal problems; have a more positive self-concept; and will have fewer stated problems related to school.

The complete set of program component objectives, prepared in measurable terms, is contained in Appendix I.

(c) Description of the General Project Design and the Procedures.

Design for the senior high component. The Alternative High School was to be staffed, organized, and installed in a location separate from existing school buildings in the District. Approximately 150 students, who were alienated from school were to be enrolled. Within the Alternative High School, the students were to pursue courses of study blending career education, academic subjects, and they were to participate in making significant decisions related to the school. Resources from the community were to be drawn upon in the design of the educational program. Student-teacher relationships were to be marked by interdependence, flexibility, openness, and sensitivity.

Design for the junior high component. Curriculum writing teams composed of teachers and students were to prepare career education curricula for inclusion in the junior high program. The courses were to include surveys of occupational clusters, as well as courses centering upon a single cluster.

Design for the guidance and counseling component. Group counseling programs were to be written for the senior high and the junior high levels. The programs were to be installed and field-tested during the term of the project.

Procedures. For the senior high component, the procedures were to recruit staff for the program (a director, teachers, counselors, and aides); enroll students (to be selected according to established criteria); develop curricula for the school (featuring options for students and use of the community as a learning laboratory); and deliver an instructional program through which students would gain increased knowledge related to careers, the world of work, and would have increased maturity in formulating post high school plans.

For the junior high school component, the procedure was to solicit proposals from staff and students for junior high-level career courses to be written. Writing teams were formed. Consultants from the University of Missouri-Columbia were brought in to help the writing teams off to a good start, and a schedule for the production of curricula was established.

For the guidance and counseling component, the procedures were different for the junior high and senior high levels. At the junior high level, the group counseling course was prepared during the summer simultaneously with the other junior high courses. Students were enrolled, and the instructional program was given during the year.

At the senior high level, a special course, Group and Student Affairs, was developed. Career and guidance counseling and testing were built into the program. Students in the Alternative School also received counseling on an ad hoc basis through both teacher-student counseling and peer counseling modes.

(d) Results and Accomplishments of the Project.

Results of the junior high component. Teacher and student writing teams from two junior high schools produced ten career education courses and twelve courses, respectively. The courses were given to students in both schools. At each school, one of the courses was not offered due to insufficient enrollment. In general, the anticipated outcomes for students occurred at the junior high school level.

Results of the guidance and counseling component. At the junior high level, a group counseling course was written, given to students, and found to be generally successful. In 1973-74 the program is being given to sixth and seventh grade students at the newly-organized Middle School. The career counseling program was not produced because the function for the course was fulfilled in the other written curricula.

At the senior high level, Group and Student Affairs was developed and delivered to Alternative High School students during the 1972-73 school year. It was operated substantially according to its design. Short-comings in the program appeared to be related to problems which were general to the Alternative High School rather than specific to the program.

Results of the senior high component. The Alternative High School was organized and installed during the first semester of the project when it was field-tested with four project staff and 43 students in Spring, 1972. The school operated during the 1972-73 school year with a staff of ten teachers (full-time equivalent), six aides, and a student body of approximately 150.

Each semester, new students were enrolled to replace graduates. The curriculum was revised and reframed each semester. The school met in several temporary locations during the three semesters.

The development, installation, and operation of the alternative school had the following general results:

(1) On the average, the students demonstrated an improved rate of attendance.

(2) Student academic performance improved.

(3) There was a measurable decrease in the number of stated personal problems among the Alternative High School students.

(4) There was no measurable increase among Alternative High School students in (a) career knowledge, (b) "career consciousness," or (c) average level of achievement motivation, as measured by instruments used in evaluating the project.

(5) The actual number of students who took part in guided vocational training programs was small; an appropriate percentage of students engaged in part-time work-study experiences, but less than one-fourth of these jobs were developed through the project.

(6) Student attitude toward school was lower at the end of the project than at the beginning, as measured by test instruments used in evaluation of the program.

(e) Evaluation of the Project. Assessment of the extent to which project component objectives were achieved was provided by an independent, third-party evaluator, whose services were contracted by project staff. In addition, an LEA "in-house" evaluator gathered documentary information and process data throughout the course of the project. The objectives contained in the original proposal were cast in a revised format by these two persons, and SEA approval of the objectives and the evaluation design was obtained. Project staff approved the objectives, evaluation design, and measurement instruments in July, 1972. A schedule for pre- and post-testing was established.

Given below are factors related to the conduct of the evaluation which have significance for the evaluative findings and the conclusions which may be drawn from them:

1. Student attendance at testing sessions in Student Affairs classes (held in four locations) was inconsistent.

2. Due to several circumstances, pre-testing with non-standardized tests was approximately one month behind schedule; achievement test pre-testing was delayed approximately two months.

3. Relatively few students appeared to have been oriented to the school as a component of a project in which evaluation was specified; therefore, there was substantial student resistance to paper and pencil testing in general and several tests in particular.

4. Only for the standardized achievement tests were staff insistent that all students attend given testing sessions; therefore, not all students took all specified tests.

The following section contains the evaluation findings for each objective.

MEASUREMENT AND ANALYSIS OF COMPONENT OBJECTIVES

Statement of the Objective: S.1.1. An educational program for secondary students, organized around career education topics, will be developed and offered to students.

Measurement Procedure: On-site natural observation of the project was conducted throughout its 18-month term. Student and staff interviews were conducted, and all major project activities were observed. Documentary records representing the major events in the project were maintained.

Presentation of Findings: The project director was identified when the project was designed and the proposal submitted. When word reached the LEA that the grant would be forthcoming, he was cleared from his previous duties in order to prepare for implementing the project in January, 1972. The director selected three staff. Criteria for staff selection included: (1) ability to relate to students in a "humane," non-authoritarian manner, and (2) ability to "cover" the academic content areas. One staff was assigned programmatic responsibility for the career education phase of the project. Subsequently, 43 students were enrolled in the Alternative School from the secondary schools in the District. Criteria for student selection included: (1) a cross-section of the secondary students in the District, (2) negative attitude toward current school program, and (3) potential for student benefiting through the program. These criteria for staff and students remained constant throughout the program.

The following activities were carried forward simultaneously: (1) enrollment of students, (2) development of curriculum based upon student interests, formal requirements, staff preference, (3) selecting a site to house the school, and (4) surveying the community for work-study and volunteer-service opportunities for students, as well as off-campus settings for student educational programs.

Classes were held initially in the basement of an elementary school. Within the first two weeks of the project, a site for the school was selected: the upper floor of a building containing a number of office spaces, which had been abandoned. The location was made available to the project through the Land Clearance Authority. The school site had to be cleared of accumulated debris and prepared for classes.

The program was field-tested from January through June, 1972. During the field-test, the school operated according to its design. The four staff and the 43 students displayed a pioneering spirit, and optional modes for learning and fulfilling educational goals on an individualized basis were carried forward. Career exploration experiences were being designed at this time, and it appeared feasible that they could be included in the total learning program of the students.

The mode for securing student involvement in significant decision-making during the field-test phase of the project was all-school town meetings. This aspect of the program proved to be a disappointment to project staff. Initially, there was substantial attendance at these meetings and student involvement in the initial ground rules for the program was evident. However, student attendance and involvement declined steadily throughout this semester. By the end of the year, it became evident to project staff that mechanisms for securing student participation would have to be developed; it would not occur and be maintained spontaneously.

During the semester, a series of meetings was held with parents of students enrolled in the program in order to explain the project and secure parent involvement and cooperation. In the late Spring, a consortium of staff from alternative schools in the St. Louis Metropolitan Area and teachers at local universities interested in the alternative school movement was formed. This group continued to meet on a fairly regular basis throughout the subsequent period of the project to share ideas and concerns.

Toward the end of the Spring, 1972 semester, students for the next school year were enrolled. Project staff and students interviewed prospective enrollees from the District senior high school and the two junior high schools. Graduating seniors were replaced, and additional students were enrolled sufficient to bring the student body up to its projected capacity of 150. Simultaneously, recruitment for teaching staff was carried forward. Present staff and students served on interview teams to select the additional staff members.

Staffing for the project occurred throughout the Summer, 1972. Eventually, the following staff were secured for the project: (1) a project director with teaching responsibilities in math; (2) three full-time guidance counselors with teaching responsibilities in physical education, home economics and social studies; (3) five full-time teachers in the social studies, English, music and art, and career education; (4) one half-time teacher in science; (5) one one-fourth time teacher in reading; and (6) one one-fourth time teacher in English.

In addition to certificated staff, the following numbers of teacher aides were secured for the school: (1) two six-hour aides with responsibilities in math, music, and English; (2) one three-hour aide with responsibilities in art and counseling; (3) one two-hour aide with responsibility in art; (4) one two-and-a-half hour aide with responsibility in English; and (5) one two-hour aide with responsibilities in foreign language and social studies.

This staffing pattern remained constant through the 1972-73 full year of the project. Twenty-three students were graduated at mid-year, and they were replaced. In March, 1973, it was determined that two teaching staff would have to be dropped for the following school year, when the project would be continued through local School District resources, as Federal funding terminated. This reduction in staffing was necessary due to the requirement that the school meet the over-all teacher-student ratio throughout the School District.

At the close of the Spring, 1973 semester, 20 students were graduated. New students were enrolled sufficient to bring the student body up to 150, once again. During the Fall, 1972 semester, the student selection procedures used in enrolling students in the Alternative High School were called into question. During the Fall semester, a Student Selection Committee was organized to review the current procedure, develop a systematic routine, and reduce that routine to written form. A report from the committee was issued in mid-November, 1972, and the procedure was used in Spring, 1973 to enroll the next year's students.

During the summer, 1972 curriculum preparation was carried forward. As additional teachers and aides were secured for the project during the summer, they took part in the preparation. The cycle established during the field-test of the program in Spring, 1972 was followed. Students who were enrolled in the program were surveyed as to their learning interests and plans. Staff were surveyed to determine courses they would prefer to deliver. Once the curriculum was prepared, a schedule was developed, and students were assigned to classes. This cycle was repeated for the Spring, 1973 semester, also. In effect, a new curriculum was developed during each of the three semesters of the project. Three basic kinds of courses were offered: those that related to academic subjects, career education courses, and non-credit optional courses. Options for completing course requirements were established. These included (1) student and teacher mutual agreement upon learning objectives to be met and products to be completed; (2) independent study; or (3) formal class attendance. For review, the curriculum (including course descriptions) is contained in Appendix 2.

During Fall semester, 1972, the quality of the course offerings was called into question. A Curriculum Review Committee composed of project staff, parents, and students was formed for the purpose of critiquing existing courses and reviewing the courses to be offered during the Spring, 1973 semester. The curriculum courses offered during the third semester of the project were reviewed and approved by the Committee. During the summer, 1972, the junior high career education courses and the junior high group guidance program were written and published. Also produced during the summer was the program, Group and Student Affairs, for the Alternative High School. These programs will be discussed in measurement of subsequent objectives.

Programmatic responsibilities for career education were carried forward by one of the staff members throughout the project. He was assisted by the counselors on the project staff in developing learning opportunities for students in the community. The career education program will be discussed in detail in the report on the next objective.

During the course of the project, the school was housed in several, temporary locations. The initial school site was sufficient to house the 43 students and four staff who made up the Alternative High School during the first semester. An additional location was secured during the summer, 1972 in order to accommodate the expanded enrollment. For the Fall, 1972 semester and into the Spring, the school was housed in the upper floor of two nearby buildings in the Loop Area toward the eastern boundary of the community. In addition to these two locations, classes met in available community facilities such as the public library and the meeting halls of several churches. Mid-way through the Spring, 1973 semester, a larger space became available for the school. The proprietor of a super market in the area went out of business, and the school moved into this location. For the first time, the entire school was housed under a single roof. In June, 1973, the school was moved from its outside location to the Ward Building, within the School District. There adequate classrooms and laboratory space, and other facilities, are available to develop the program.

Other significant events during the Spring, 1973 semester which were documented include: in March, 1973 the School Board approved the Alternative High School for continuation under LEA funds, following the termination of Federal funding for the program. A proposal was prepared for the local Board of Education by project staff, and the Board's decision was based upon this, and such data concerning the program as were available at that time. The project staff member responsible for the career education program developed a proposal to the Board of Education for a work-study program to be carried out cooperatively with the RIDC and the McDonnell-Douglas Corporation. During the summer, 1973, project staff engaged in a critical review of their program. It was determined that career education was to be made a more central part of all curriculum courses offered through the Alternative High School. This had not occurred sufficiently during the term of the project to bring about several key student outcome objectives of the project, related to career education.

The major events of the project described above are summarized in Table 1.

Specified in the program design was that the Alternative School student body would be representative of a cross-section of the secondary students in the School District. This criterion was met generally. Descriptive data concerning the Alternative School student body are presented in Appendix 3.

Certain features built into the design of the Alternative High School had implications for the manner in which it operated and for the attainment of certain objectives. It is appropriate to report this process-analytic data in measurement of this objective. Distinguishing features of the Alternative High School were to include: (1) provision for learner exploration of academic areas in a personal, experimental way; (2) optional non-credit courses tailored to perceived needs of the students; and (3) commitment to "humanistic education" objectives, which focused upon internal states such as feelings, interpersonal relationships, and non-authoritarian communication.

TABLE 1

A TIME LINE OF PROJECT EVENTS

Time	Staffing	Curriculum	Procedures	Activities	Career Education
1972	•Proj. Dir.				•1 staff given career ed. program responsibility
Jan.	•3 add'l. staff			•Initial contacts for •Work-study •Volunteer service •Off-campus education	
Feb.	•43 students enrolled	•Curric. developed •Student interest •Academic rqmnts. •Staff preference	•Move into school		
Mar.			•Student Town Mtgs.		
Apr.			•Parents Mtgs.		
May	•153 students enrolled	•Develop: (1) new curriculum; (2) Student Affairs program; (3) junior high mini-courses		•Consortium of area Alt.Schols. established	
June					•Career Education Program developed
July					
Aug.	•10 F.T.E. staff and 6 aides		•2 locations and off-campus sites for Alt. H.S.		
Sept.		•Jr. High Guidance curric. published		•Parents' organization formed	
Oct.					
Nov.	•23 new students enrolled - replace grads	•Curr. Review Committee formed -Critique -Review	•Student Selection Committee Report	•Open House	
Dec.					
1973					
Jan.					
Feb.		•Curriculum revised; Committee approved			
Mar.	•Announced reduction of 2 staff		•School consolidated in 1 building	•School Board grants program continuation	•Work-study program w. McDonnell-Douglas
Apr.					
May	•150 enrolled for 73-74			•Critical review of Program	•Career Ed. to be a part of all courses
June	•20 students grad.		•School moves to Ward		

Furthermore, all teachers in the project were to fulfill roles in administration, curriculum development and selection, instruction and guidance. The criterion was expressed that a visitor to the school site should not be able to tell at first glance which person was the director, and which were the counselors and teachers, since all staff would be performing all functions. The functions and processes for the Alternative School are presented in diagram form in Figure 1. The school functions and the processes delineated in the model presented in Figure 1 were followed substantially. However, the flexibility and the openness in the program brought about role conflicts and divergent opinions among project staff which remained fairly constant throughout the 1972-73 school year.

The individualistic nature of the school and the emphasis several staff placed upon "doing your own thing" resulted in a generalized emphasis upon the Alternative School aspect of the program and a generalized de-emphasis upon the career education aspect.

The students selected into the program were, almost universally, antagonistic toward the traditionalized education program they had encountered prior to the Alternative High School. Thus, a major thrust for the program was meeting the personal-social-psychological needs of the students. These factors, combined with the difficulty of communication during the period when the school operated from different locations, resulted in a failure to place career education learnings at the center of the curriculum for the Alternative High School. The major burden for achieving the career education objectives of the program was left to a minority of the project staff, for the most part. Presented in Appendix 4 is a description of the major units and topics in selected courses, the Curriculum Review Inventory. These were completed by the teachers of the courses and they reveal a lack of emphasis upon careers and occupations.

Interpretations and Conclusion: The observational and documentary data gathered in measurement of this objective indicate that the Alternative High School was formed, staffed, and students were enrolled in a manner consistent with the project design. Furthermore, the student population reflected a cross-section of the secondary students in the School District, although representation was not proportional. One of the criteria for student selection was negative feelings toward the secondary schools and curriculum, which they had encountered prior to the opportunity to join the Alternative School.

The design criteria that: student-teacher relationships be marked by mutuality and non-authoritarianism; students and teachers participate in curriculum development; and that teachers perform administrative and counseling functions were met generally.

The design criterion that career education learning sequences be infused throughout the curriculum sufficiently to result in specified student outcomes concerning career and vocational knowledge and attitudes was not met to a practically significant extent.

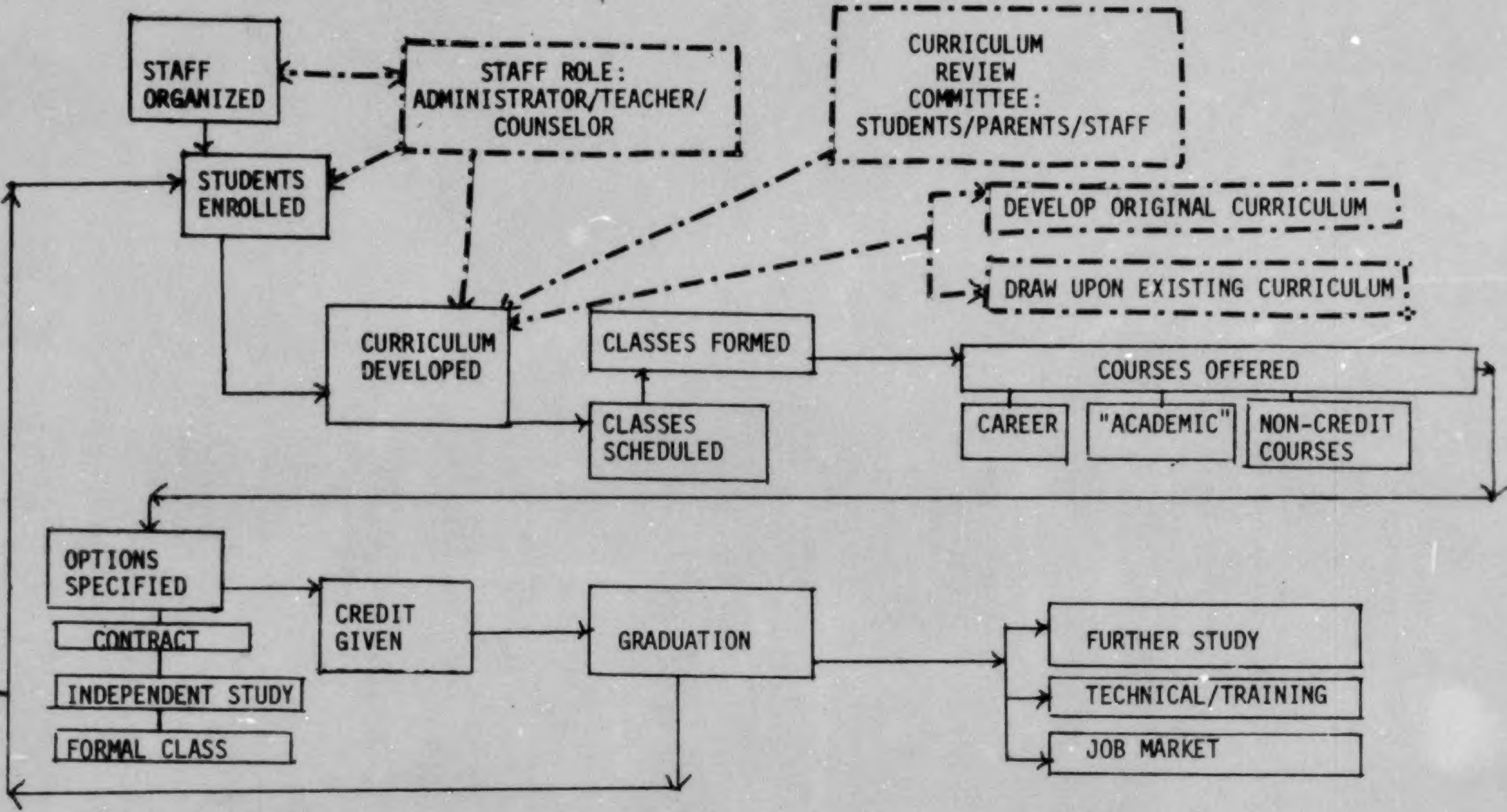

FIGURE 1: Model for the Alternative High School

Statement of the Objective: S.1.2. Instructional programs, approaches, or similar educational modes will be developed for the Alternative School.

Measurement Procedure: The operational definition for the objective specified that the educational approaches were to be designed to increase students' self-knowledge in terms of choosing an eventual career and knowledge about the world of work and occupational clusters. In measurement of this objective, natural observations of the program were made throughout the term of the project and documentary records of this phase of the Alternative High School program were maintained.

Presentation of Findings: It was reported previously that one staff member had general responsibility for the career education program in the Alternative School. It was reported in Table 1 on page 11 that development of the career education program began with the start-up of the project. During the trial-developmental phase in Spring semester, 1972, the effort during this period centered upon securing work-study or volunteer-service community opportunities for students, reviewing commercially available curricula, trying out experimental classes, and developing fully the career education program. As noted in Table 1, program development was accomplished during summer, 1972.

Presented in Table 2 is a summary description of the career education program for the Alternative High School. Summarized in the table are the design criteria for the three program elements: self-awareness in relation to the world of work, occupational awareness, and educational awareness. The anticipated outcome from each element in the program design is stated briefly, and the actual observed outcomes are presented.

Interpretations and Conclusion: The information presented in Table 2 indicates that the self-awareness program for students was fulfilled generally according to the design criteria and expected outcome. Most students completed the Profile Analysis and all students completed the Holland Planning Guide instrument. Only three Student Affairs groups used the Career Game.

For the occupational awareness portion of the program, some efforts were made. However, of the students who worked at jobs part-time, slightly more than half did so as part of their course work.

For the educational awareness phase, the outcomes fell short of expectations. This appeared to be related to factors in the school reported for objective S.1.1, the general immersion of staff and students in attempting to make the Alternative High School operational, continually developing new curricula reflecting student interests and the communication problems encountered in trying to run a school operating in numerous locations.

Reviewing all the evidence, this objective can be said to have been met to only a limited extent.

TABLE 2

CAREER EDUCATION COMPONENT FOR UNIVERSITY CITY ALTERNATIVE HIGH SCHOOL

A. SELF AWARENESS

Program Design	Anticipated Outcome	Actual Outcome
1. Each student required to complete a profile analysis by the use of scales and instruments to measure: (a) values, (b) interests, (c) abilities, (d) scholarship, (e) personality, and (f) attitudes.	1. That each student in school would complete this for his own information and for his permanent files and present and future guidance	1. About 75 percent of the students completed this career profile analysis for their files.
2. The utilization of the life career game developed by Sarane S. Boocock Academic Games Associates.	2. That this game be made available to all classroom teachers and leaders of Student Affairs groups to be used at their discretion.	2. This was known to be used by three separate groups.
3. Use of self-directed search method--a Guide to Educational and Vocational Planning developed by John L. Holland, Ph.D.	3. This self-awareness tool was to be used in the Life Career Development Class to be completed by all involved.	3. All students, formal class and independent study students, completed this and discussed it with person responsible for career education at the Alternative School.

TABLE 2 (continued)

B. OCCUPATIONAL AWARENESS

Program Design	Anticipated Outcome	Actual Outcome
1. Individual student exploration of different occupations.	1. That many students would elect to explore one or many occupations by on-site visits without pay for class credits.	1. Thirty-two students participated for class credits.
2. Tours and field trips.	2. Fifteen field trips (one for each career cluster area) were planned for all students in the Life Career Development class.	2. Nine field trips were made. However, not only class members attended, but there was good participation from students who were not in the class.
3. Outside resources brought into the school.	3. Attempts were made to bring in people from various occupations to supplement classroom work and field trips. These were made available to the entire school.	3. There was a total of five visitors to the classroom. There were several students participating who were not a part of the class. One visitor addressed the entire student body. The entire school took an active part in the Career Day held at the senior high school.

TABLE 2 (continued)

OCCUPATIONAL AWARENESS (continued)

Program Design	Anticipated Outcome	Actual Outcome
4. Involvement in C.O.E. and D.E. programs at senior high school.	4. That this would be a resource for those students who needed to work for pay and those desiring to learn a skill while attending high school.	4. Five students chose this resource.
5. Class credits given for students involved in actual employment.	5. That class credits on an independent basis would be allowed for employed student whether employment was self-acquired or they were placed by the school.	5. Seventy students acquired their own jobs and 24 students were placed by the school. However, only 32 of these wanted class credit through independent study.
6. Industry-school cooperative program. That we will place 30 students at McDonnell Douglas Aircraft Corporation, full time, for one quarter.	6. That these students will get an in-depth view of the manufacturing cluster in hope that they can better understand the remaining 14 career clusters.	6. Program is scheduled to begin operation in September, 1973.

TABLE 2 (continued)

C. EDUCATIONAL AWARENESS

Program Design	Anticipated Outcome	Actual Outcome
1. Teacher correlation of subject matter with career awareness.	1. That each academic teacher would show the relationship between his subject matter and the world of work.	1. Infusion of career-related topics in all curriculum courses, by all teachers, did not occur.
2. Field trips and bringing in of outside resources.	2. All students would be exposed to educational institutions that would allow them to learn the skills necessary for a chosen career, such as: technical high schools, apprenticeship programs, trade schools, junior colleges, and four-year colleges and universities.	2. A representative from the county technical high school spent two hours with the entire student body explaining admissions and possible outcomes of its graduates. Forty students participated in a 3-day Career Fair that attracted students from all schools in the St. Louis Metropolitan area. Representatives of all the institutions mentioned were present.

Statement of the Ovjective: S.2.1. Students will increase in level of knowledge regarding pertinent aspects of selected occupations, representing basic occupational clusters.

Measurement Procedure: The achievement of this objective was estimated from an analysis of the results of pre and posttest of vocational knowledge. The Fraser Vocational Knowledge Inventory was used for measuring the outcomes of this objective. The significance of difference between the pre and posttest means was determined from a t test for correlated means.

Findings: The statistical report of the results of the pre and posttests of vocational knowledge is presented in Table 2a. Test results on the VKI were available for only 40 of the Alternative School students. The results showed that these students did not change significantly in their level of vocational knowledge during the 1972-73 school year. The pretest mean was 26.02 and the posttest mean was 24.02.

Interpretations and Conclusion: The small number of students from whom test data were collected makes any interpretation for the total Alternative School group open to serious question. There is no basis for generalizing the results for this small "voluntary" sample to the total group. The findings for the sample tested suggest two conclusions: (1) The level of vocational knowledge did not increase during the project year, and (2) the mean level of vocational knowledge for this sample indicates a somewhat limited knowledge among these students. (The mean for the group was relatively lower than that found for other research groups at the same grade level.) The outcome analysis supports the conclusion that, for the sample tested, the objective was not achieved.

Table 2a

MEANS, STANDARD DEVIATIONS, AND TEST OF CHANGE ON CRITERION MEASURES FROM PRETEST TO POSTTEST FOR PUPILS ENROLLED AT ALTERNATIVE SCHOOL 1972-73

Criterion Measure	N	Pre		Post		Dep t	DF
		$\overline{X}$	S.D.	$\overline{X}$	S.D.		
Attitude toward School	83	20.40	5.98	14.84	4.81	-6.67*	82
Picture Inventory of Occupational Knowledge	66	63.39	14.06	64.63	17.46	0.56	65
Vocational Development Inventory	80	10.32	3.22	10.91	3.29	1.16	79
Student Attitude Survey	76	15.36	3.90	15.23	4.68	-0.28	75
P. E. C. E. Knowledge Test	76	38.84	10.49	38.38	13.75	-0.39	75
Vocational Knowledge Test	40	26.02	12.39	24.02	15.90	-0.76	39
Self Esteem Inventory	80	37.56	9.35	38.61	9.66	0.86	79
Mooney Problem Checklist	55	31.85	20.19	22.61	22.70	-2.96*	54

* $P < .05$

Statement of the Objective:

S.2.2. The students served through the program will demonstrate a significant increase in their measured level of vocational maturity.

Measurement Procedure: Vocational maturity, for purposes of this objective was measured by an adaptation of the P.E.C.E. Knowledge Test. The sections of the test used were designed to measure understanding, application, and attitudes toward concepts of work, career development, and vocational decision making. The achievement of the objective was estimated from an analysis of pre and posttest data using a t test for correlated data to determine the significance of change.

Findings: The pre and posttest means on the P.E.C.E. Test, and the results of the analysis are presented in Table 2a . Test results were available for 76, or roughly 50 percent, of the Alternative School students. The results showed that these students did not change in their level of vocational maturity, as measured by this test, during the 1972-73 school year. The pre and posttest means were almost identical, although the standard deviation increased somewhat.

Interpretations and Conclusion: The data obtained from the sample of students who agreed to take the test do not provide conclusive evidence for the total group of Alternative School students. The data presented was, however, conclusive for the sample. There was no change in their level of measured vocational maturity. Therefore, it must be concluded that this objective was not achieved.

Statement of the Objective: S.2.3. Students served by the project will take part in training and/or actual work experiences.

Measurement Procedure: This objective was measured by maintaining documentary records concerning student participation in specified work or training experiences.

Presented below in Table 3 is a descriptive summary of student involvement.

TABLE 3

Student Involvement in Life Career Exploration Experiences

Within Alternative School:	
Life Career Development Class	9
Life Career Guidance	152
Senior High School:	
COE Automotive Technology	4
Work Experiences in Community	
(Jobs developed by staff)	24
Work Experience in Community	
(Student acquired job)	62

It may be seen that 86 students engaged in work experiences in the community and 13 were enrolled in appropriate courses.

Specific data concerning job exploration activities is presented in summary form in Table 4. The data show that during spring semester, 1973, the majority of students working at paid jobs were males, and most were high school juniors and seniors. Clerical and custodial duties were the major kinds of work performed.

Interpretations and Conclusion: More than 60 percent of the students worked at part-time jobs or took appropriate training. In terms of its specified criteria, the objective was met.

TABLE 4

Occupational Exploration in the Alternative School, Spring Semester, 1973

Type Job Site	Type of Work	Number Students	Grade	Sex
PAID JOBS				
Clothing Store	Custodian	1	12	M
Service Station	Mechanic Attendant	3	11 11 9	M M M
Hamburger Stand	Short-order Cook	2	11 12	M M
	Custodian	2	11 10	M M
Truck Terminal	Clerical	1	11	M
Artist Supply Store	Clerk	1	12	M
City Park Dept.	Forester	1	11	M
Shoe Store	Packing Clerk	1	10	F
Music Store	Clerical	1	11	F
Realty Company	Clerical	1		F
Ice Cream Store	Clerk	1	12	F
VOLUNTEER JOBS				
Local Beekeeper	Beekeeper	1	11	M
Acid Rescue	Telephone Counseling	1	11	F

Statement of the Objective: S.3.1. Students will demonstrate a significantly more positive attitude towards school.

Measurement Procedure: Attitude toward school was operationalized for purposes of this objective with a 29 item scale to which the student responded by indicating whether he agreed, disagreed or was not sure about each item. The scale referred to "school," in most of the items, in a generic sense without reference to the student's school or a particular school. The achievement of the objective was estimated from a t test analysis of difference between pre and posttest means for the Alternative School students who responded to this scale.

Findings: The pre and posttest means for the 83 students, and the results of the t test analysis for the Attitude Toward School measure are reported in Table 2a. The pretest score (20.4) indicated a rather negative attitude toward school and the posttest (14.8) score was significantly lower, indicating an attitudinal change in the opposite direction of that projected in this objective.

Interpretations and Conclusion: The data were rather conclusively negative with respect to achieving a more positive attitude toward school with the Alternative School program. The obvious conclusion is that Objective S.3.1 was not achieved. Although this conclusion is amply supported, these findings are contradictory to the subjective observations of some of the school staff. There are at least two possible explanations for this inconsistency: (1) Only 83 of the 149 Alternative School students responded to the attitude scale and they might not have been representative of the total group; and (2) the students may have responded to the term "school" in the scale from their perceptions of the "traditional school" rather than the Alternative School program in which they were participating. There is no evidence to support either of these explanations, but it is suggested that they be considered in any future measurement of school attitudes among students in the Alternative School.

Statement of the Objective: S.3.2. Students enrolled in the program will demonstrate improved attendance rates and rates of remaining in school.

Measurement Procedure: The number of days absent in 1971-72 and 1972-73 was available from attendance records for a sample of 65 percent of the students who were enrolled in the Alternative School. The official transcripts maintained by the school district were examined for each student, and the number of absences recorded for the 1972-73 school year and the 1971-72 school year were recorded for each individual. This procedure yielded information concerning the number of days each of the 111 students in the sample was absent while enrolled in the Alternative School and the number of days absent during the year immediately prior to attending the school. These data were analyzed through a t-test for correlated means.

Presentation of Findings: A descriptive summary of the documented absences for the 111 students in the sample is presented in Table 5. The information in the table presents the range, as well as measures of central tendency (mean) and variability (standard deviation). It may be seen from the data presented that: (1) in the year prior to enrolling in the Alternative School, students in the sample were absent approximately 28 times, on the average. Approximately 10 percent of the students were absent 6 times or less in that year. From the standard deviation, it may be noted that there was a great deal of variation among the students in this sample; (2) during the year in which they were enrolled in the Alternative School, the students in the sample were absent 22 days, on the average. Furthermore, 27 percent of them were absent 6 days or less. The data indicate that there was still a great deal of variation among the students in the sample.

A comparison was made for each student in the sample of the number of days absent in each of the two years. A summary of the findings from this comparison is presented in Table 6 . It may be seen from the data presented that 51.3 percent of the students in the sample were absent less frequently during the year in which they were enrolled in the Alternative School, 25.2 percent were absent more often, and 23.4 percent were absent approximately the same number of days during both years. The largest decrease was from frequency intervals of 11 days or more to the interval of 0 to 10 days.

In order to determine whether the decrease in absences was significant to a measurable extent, a t-test for correlated means was applied to the data. The results of the test are presented below in Table 7.

Interpretation and Conclusion: The data presented in measurement of this objective indicate that for most of the students in the sample, there was a generalized decrease in numbers of absences. Approximately one-fourth of the students in the sample were absent a greater number of times during the year in which they were enrolled in the Alternative High School. For six of them (5.4 percent) the increase in absences

TABLE 5

Descriptive Summary of the Number of Absences of Selected Alternative School Students in 1971-72 and 1972-73

Documented Absences

Step Intervals	1971-72		1972-73	
	freq.	percent	freq.	percent
133-139	---		1	0.9
126-132	---		---	
119-125	---		---	
112-118	---		1	0.9
105-111	---		1	0.9
98-104	2	1.8	---	
91-97	1	0.9	2	1.8
84-90	1	0.9	1	0.9
77-83	---		1	0.9
70-76	3	2.7	1	0.9
63-69	2	1.8	1	0.9
56-62	---		3	2.7
49-55	5	4.5	3	2.7
42-48	11	9.9	7	6.3
35-41	10	9.0	6	5.4
28-34	13	11.7	3	2.7
21-27	11	9.9	5	4.5
14-20	19	17.1	16	14.4
7-13	22	19.8	29	26.1
0-6	11	9.9	30	27.0
Totals:	111	99.9	111	99.9
Mean:	28.04		21.98	
Standard Deviation:	21.45		27.68	

TABLE 6

Attendance Patterns of Selected Alternative School Students: Yearly Absences Prior to and During Project Period

Absences in 1971-72 By Frequency Intervals	Absences in 1972-73, By Frequency Intervals														
	0-10	11-21	22-32	33-42	44-54	55-65	66-76	77-87	88-98	99-109	110-120	121-131	132-142	Total	%
132-142															
121-131															
110-120															
99-109	2														
88- 98	1			1											
77-87															
65-76	1		1	1	2										
55-65	1							1							
44-54	4	1		1	1	1		1		1	1		1		
33-42	1	8		2		3	1		1						
22-32	7	7	2		2										
11-21	18	3	3		4		1		1						
0-10	18	5			1										
No. of Students Demonstrating: Increase:	0	5	3	0	7	4	2	2	2	1	1	0	1	28	25.2
No Change:	18	3	2	2	1	0	0	0	0	0	0	0	0	26	23.4
Decrease:	35	16	1	3	2	0	0	0	0	0	0	0	0	57	51.3

TABLE 7

Significance of Difference (1-tailed test) Between Number of Days Absent During the Year Prior (1971-72) and the Year of Enrollment in the Alternative High School, for 111 Students

Year	Total Absences	D	D^2	SE	t	P
1971-72	1368.5	753.4	103034.75	3296.86	+2.39	$<.025$
1972-73	1341.5					

was substantial. However, for slightly more than half the students, the absent rate decreased.

When an inferential significance test was applied to the data consisting of each student's number of absences in 1971-72 and in 1972-73, the decrease in absences during the second year was significant beyond a level that could be expected to have occurred by chance.

Project records indicated that only two students enrolled during the year were school drop-outs. Since (1) the drop-out rate was low and (2) student absences decreased to a statistically significant extent, this objective is considered to have been met.

Related information, a comparison between attendance at the Alternative School and senior high school, is presented in Appendix 5.

Statement of the Objective:	S.3.3.	Students enrolled in the program will demonstrate an increased level of achievement motivation.

Measurement Procedure: Achievement motivation, for purposes of this objective, was measured by administering the Russell Student Attitude Survey pre and post. This scale contains 30 items designed to assess the students' disposition toward such achievement motivation concepts as "desire to excell," "competitiveness," and "rewards." A t test analysis was used to determine the significance of difference between the pre and posttest scores on this scale for the 76 Alternative School students for whom data were available.

Findings: The pre and posttest means for the Student Attitude Survey, and the results of the t test are presented in Table 2a. These results show that there was no change in the achievement motivation of this sample of students during the 1972-73 school year.

Interpretations and Conclusion: Although only 76, or about one-half of the Alternative School students responded to this measure, the evidence is quite clear that their 1972-73 school experience did not change their achievement motivation. It must, therefore, be concluded that objective S.3.3 was not achieved during the 1972-73 school year. This conclusion is well supported for the group, however caution should be exercised in generalizing to individuals - note case reports.

Statement of the Objective: S.4.1. Students enrolled in the Alternative School will increase, or at least not decrease in measured levels of achievement in academic subjects.

Measurement Procedure: Four of the Comprehensive Tests of Basic Skills (Language Mechanics, Language Expression, Arithmetic Concepts, and Arithmetic Applications) were administered to each of the four grade groups at the Alternative School on a pre-posttest schedule. Two types of analyses were used to estimate the achievement of this objective: (1) A pre-posttest analysis of gain in each achievement area; and (2) a comparison of the level of the achievement of the Alternative School students with the national norms for the respective grade groups.

Findings: The analyses of achievement gains during the 1972-73 school year are reported in Table 7a . All four grade groups made significant gains in Language Expression and Arithmetic Application; all grade groups except the twelfth grade gained in Arithmetic Concepts; and, only the ninth grade group showed a gain in Language Mechanics. The comparisons of the Alternative School groups with the national norms for the CTBS are reported in Table 7b . This analysis showed that each of the Alternative School grade groups maintained or increased the percentage of their group during the year above the national median on the Language Mechanics, Language Expression and Arithmetic Application Tests. The ninth grade group dropped slightly on the Arithmetic Concepts Test. It should also be noted that the twelfth grade group was the only group with a median below the national norm on all four tests.

Interpretation and Conclusion: This objective stated an increase or maintenance of achievement level. The evidence clearly supports the conclusion that the objective was achieved as stated. It should again be noted that only slightly more than one-half of the Alternative School students were tested for this objective. Conclusions based on a voluntary sample of this size should be verified by more complete data.

Table 7a . Pre - Post Analysis of Pupil Achievement In University City Alternative School

Group	Comprehensive Test of Basic Skills						
	N	Pre		Post		$\overline{X}_2-\overline{X}_1$	t
		$\overline{X}_1$	S.D.	$\overline{X}_2$	S.D.		
Language Mechanics							
Grade Nine	19	15.47	4.07	17.47	2.54	2.00	3.05*
Grade Ten	18	16.50	3.25	17.44	4.08	1.06	1.42
Grade Eleven	21	16.80	3.65	18.00	3.72	1.20	1.79
Grade Twelve	22	15.50	3.43	16.81	4.39	1.31	1.83
Language Expression							
Grade Nine	20	19.35	6.21	23.15	4.03	3.80	3.13*
Grade Ten	18	20.66	4.86	22.11	5.30	1.45	2.14*
Grade Eleven	21	21.90	4.52	24.42	4.83	2.52	4.56*
Grade Twelve	22	20.00	5.09	22.36	5.57	2.36	2.20*
Arithmetic Concepts							
Grade Nine	21	17.61	4.11	20.57	5.96	2.96	3.42*
Grade Ten	18	17.94	6.23	20.38	5.77	2.44	3.49*
Grade Eleven	22	19.68	6.55	21.72	6.47	2.04	4.03*
Grade Twelve	23	18.82	5.74	20.30	6.43	1.48	1.41
Arithmetic Application							
Grade Nine	21	12.19	3.03	14.28	3.77	2.09	3.71*
Grade Ten	18	11.72	3.97	14.33	4.01	2.61	2.65*
Grade Eleven	22	11.86	4.89	13.68	4.98	1.82	3.92*
Grade Twelve	23	11.65	5.03	13.60	5.49	1.95	2.38*

Table 7b. Pre-post Comparison of Pupil Achievement in University City Alternative School with National Norms Median

Group	Comprehensive Tests of Basic Skills			
	N	Pre Percent Above Nat'l Median	Post Percent Above Nat'l Median	Change
		Language Mechanics		
Grade Nine	19	47.4	63.2	+15.8
Grade Ten	18	33.3	66.7	+33.4
Grade Eleven	21	38.1	47.6	+ 9.5
Grade Twelve	22	13.6	31.8	+18.2
		Language Expression		
Grade Nine	20	55.0	80.0	+25.0
Grade Ten	18	55.6	55.6	0.0
Grade Eleven	21	71.4	81.0	+ 9.6
Grade Twelve	22	36.4	45.5	+ 9.1
		Arithmetic Concepts		
Grade Nine	21	57.1	52.4	- 4.7
Grade Ten	18	44.4	44.4	0.0
Grade Eleven	22	45.5	54.5	+ 9.0
Grade Twelve	23	30.4	34.8	+ 4.4
		Arithmetic Application		
Grade Nine	21	52.4	61.9	+ 9.5
Grade Ten	18	44.4	66.7	+22.3
Grade Eleven	22	36.4	40.9	+ 4.5
Grade Twelve	23	21.7	30.4	+ 8.7

Statement of the *Objective:* S.5.1. Students enrolled in the Alternative School will exhibit an increased positive attitude toward engaging in planning for entering the world of work.

Measurement Procedure: Attitudes toward planning entering the world of work were measured pre and post by using a modified version of the Crites *Vocational Development Inventory*. The 17 items selected for use in this scale were designed to measure the student's attitude toward vocational planning, particularly as it relates to him as an individual. The attitude change of the Alternative School students was estimated by a t test of significance of difference between the pre and posttest scores on this inventory.

Findings: The pre and posttest results for the 80 Alternative School students who responded to the *Vocational Development Inventory*, along with the t test analysis, are reported in Table 2a. These students had a posttest mean slightly higher than that for their pretest, but not enough to reach the established level of significance.

Interpretation and Conclusion: Objective S.5.1 stated that there would be an *increased* positive attitude toward planning for entering the world of work. No increase was observed and this evidence supports the conclusion that the Alternative School did not achieve this objective with the students from whom data were collected. It should be noted, however, that when the distribution of scores was examined about 25 percent could be interpreted as having a good attitude. With this many of the group having quite favorable attitudes on the pretest, it would have been difficult to effect a significant change in the absence of a highly concentrated intervention aimed at this specific outcome. The process report suggests that the program probably did not emphasize this outcome sufficiently to demonstrate change in attitudes of this type.

Statement of the Objective: S.6.1. Students in the program will demonstrate an incremental amount of career "planfulness."

Measurement Procedure: Documentation regarding this objective was to have been assembled by the Alternative School staff in their weekly contacts with students. These data were not collected and no report is available to evaluate the achievement of this objective.

Statement of the Objective: S.6.2. Those students who indicate an interest in a specific occupation, or cluster, will increase in their level of ability to demonstrate career consciousness.

Measurement Procedure: A self-rating instrument, the Career Investigation Inventory, was designed especially for this project to use in measurement of this objective. The instrument called for students and teachers to each rate provisional career choices made by students for consistency with students' personal variables.

However, this instrument was not used in the project. Instead, students completed a profile analysis to measure values and interests, as well as abilities and attitudes. Students completed, also, Holland's Guide to Educational and Vocational Planning. Furthermore, about one-third of the students used the Career Game (Academic Games Associates) during the year.

Presentation of Findings: It was reported in Table 2 that about three-fourths of the students completed the Career Profile Analysis, and all students completed the Educational and Vocational Planning Guide. Furthermore, all students in the school discussed the results with the project staff person responsible for the career education program in the school.

Interpretations and Conclusion: Documentary evidence suggests that the general processes called for by this objective were, in fact, engaged in. However, the staff member responsible for the career education program reported that statistical records were not kept due to the fact that the analysis sessions were held on an occasional "catch-as-catch-can" basis.

It is possible to state that ultimate career intentions were discussed with each student in the school at least once during the year. However, this objective cannot be measured according to the evaluation criterion established for this objective since the numerical comparison data specified was not maintained.

Statement of the Objective:	S.6.3. Students, upon completion of the program, will engage in career-related post-school activities.

Measurement Procedure: All graduating seniors during the term of the project were surveyed as to their post-high school intentions. Complete returns were received from all 49 students.

Presentation of Findings: The survey reports are summarized in Table 8. Nearly 47 percent of the Alternative High School graduates enrolled in a four-year college upon graduation. Approximately 22 percent entered the job market. Approximately 12 percent enrolled in a vocational-technical school, and approximately 8 percent enrolled in local junior colleges. Only one person expressed an intention to enter the armed forces, and four persons did not graduate on schedule. Of the latter, two planned to return to the Alternative High School.

Interpretations and Conclusion: Since all graduates from the school responded to the survey of post-school intentions with plans consistent with the operation definition for the objective, the objective is considered to have been met, generally. No ratings were received by staff as to the appropriateness of student plans.

TABLE 8

Post High School Plans of Graduating Seniors

	4-Yr. College-University	Enter Job Market	Vocational/ Technical School	Junior College	Armed Forces	Did Not Graduate
f	23	11	6	4	1	4
%	46.9	22.4	12.2	8.1	2.0	8.1
	University of Mo.-Columbia (4) Wash. U. (3) Grinnell (Ia.) (2) Central Mo. State (2) S.E. Baptist Coll. New Coll. (Sarasota, Florida) U. of Wisconsin Indiana U. U. of Kansas Columbia U. New Rochelle Coll. (NY) Cornell Lincoln U. Tarkio College Overseas Study	Famous-Barr County Hospital St. Louis Post-Dispatch Engineering firm Bookstore Bank Working (5)	Fashion Design School Mo. School for Doctors' Assistants & Medical Technicians Police Academy Parks College (2)	Meramec (2) Forest Park Florissant Valley		(2 will return to Alt. School)

Statement of the Objective: J.1.1. Courses of instruction developed around topics related to career education will be developed for junior high school students.

Measurement Procedure: The objective was measured through maintaining documentary records validating the production of junior high courses developed around topics such as the world of work, occupational clusters, or specific occupations.

Presentation of Findings: The records indicate that the time schedule observed in meeting this objective was:

1. March, 1972: junior high curriculum leaders were notified by the project director of opportunity to develop junior high career curricula, supported by the project.
2. April and May, 1972: junior high staff submitted proposals for specific curriculum units, or mini courses.
3. By June 1, 1972: writing teams were formed for preparing each approved course.
4. June-August, 1972: the curricula were written and copies for the schools were prepared.

Records maintained indicate that the writing teams were composed of teachers and students; there was no participation from business representatives. Records indicate, also, that eight courses were produced by the teacher-student writing teams from Brittany Junior High School, and nine units were developed by the teacher-student writing teams from Hanley Junior High.

Given in Table 9 is information concerning the writing teams and the courses produced.

Interpretation and Conclusion: The writing teams consisted entirely of students and teachers. No representatives of local businesses, industries, or professions were involved. With this single exception, the objective was met in terms of the specified intention of the project, within the allotted schedule.

TABLE 9

Development of Junior High Career Curricula
Summer, 1972

Course Writers

Brittany Junior High

Teachers:
- J. Appel
- L. Noble
- G. Ferguson
- D. Rogers
- J. Landrum
- F. Balog
- L. Georgeceff

Students:
- J. Wheeler
- K. Houston
- L. Thornton
- K. Shelton
- D. Harris

Hanley Junior High

Teachers:
- P. Becklean
- E. Alexander
- R. Melechen
- E. Moses
- S. Suggs
- B. Shapiro
- E. Carruthers
- L. Maufus

Students:
- D. Carter
- K. Daniels
- L. Donnelly
- S. Doyle
- S. Helfman
- D. Hester
- P. Jordan
- P. Levine
- S. Proffit
- A. Ruffin
- S. Ramsey
- A. Thomas

Courses Produced

Careers in Art
Child Development & Family Relations
Personal Culture
Sociology of Occupations
Careers in Communications
People in Literature
Survey of Occupations
Situational English
Group Counseling Program
Careers in Science
Career Survey
Careers
Careers in English
Exploring Your Potential
Mass Communication
Careers in Home Economics
Careers in Physical Education

Statement of the Objective: J.1.2. The "career cluster" courses developed for the program will be implemented into the program of the two junior high schools in the school system during the 1972-73 school year.

Measurement Procedure: Recording that the courses were offered at each school and the number of students enrolled in each course constituted the measurement of this objective.

Presentation of Findings: Reported in Table 10 is: (1) a list of the courses offered in each school during the year and (2) the number of students enrolled in each course. It may be noted that at both schools all but one of the produced courses was given. In Brittany Junior High School, the courses were offered as mini courses within a trimester schedule. In Hanley Junior High School, the courses were taught as units infused within courses such as English and science within a semester schedule.

Interpretations and Conclusion: The objective is considered to have been met substantially. The courses were offered to students, and a number of students did receive appropriate instruction. The evaluation criterion that 75 percent of the classroom teachers use at least one unit or topic was not met, as the courses were very specific, intended for certain areas only.

TABLE 10

Enrollment in Junior High Career Courses, 1972-73

Brittany		Hanley	
Course	Enrollment	Course	Enrollment
Careers in Art	24	*Grp. Counseling Prgm. (Gr.7)*	150
Child Development & Family Relations	62	*Careers in Science (Gr. 7)*	115
Personal Culture	23	*Careers Survey (Gr. 7)*	115
Sociology of Occupations	25	*Careers in English (Gr. 7)*	115
Careers in Communication	78	*Careers (Grade 8)*	225
People in Literature	29	*Exploring Your Potential (Gr. 9)*	100
Occupations Survey	25	*Mass Communication (Gr. 9)*	50
		Careers in Home Economics (Gr. 7 and 8)	205
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"*Situational English*" not offered due to insufficient enrollment		"*Careers in Physical Education*" not offered due to insufficient enrollment	

Statement of the Objective:	J.2.1.	Junior high school students enrolled in the program will exhibit an increased level of knowledge concerning selected aspects of occupations.

Measurement Procedure: Vocational knowledge, for purposes of this objective, was measured by the Guerra, Picture Inventory of Occupational Knowledge (PIOK). This inventory was designed to measure the student's knowledge of the level of (1) education, (2) activity, (3) income, and (4) living typical of 33 representative occupations. The inventory was administered pre and post to (1) a sample of students from each of the Junior high schools (Hanley and Brittany) who had enrolled in at least one of the career education courses; and (2) a control sample consisting of Hanley students who had not enrolled in the career education courses. These data were analyzed in two ways: (1) The change in knowledge scores was analyzed for the Hanley, Brittany, and control groups separately; and (2) the scores of the Hanley participating students were compared pre and post with the scores of the control students. The small number of control pupils at Brittany limited the second analysis to the Hanley group.

Findings: The findings with respect to the achievement of Objective J.2.1 were mixed. The summary of the basic analyses are reported in Tables 10a, 10b, 10c, and 10d and provides evidence for the following observations. The Brittany students made significant gains from pre to posttest in their vocational knowledge; and although they did not differ from the Hanley control group on pretest scores, they were significantly higher on the posttest. The Hanley students did not change significantly in their pre-post PIOK scores, nor did they differ from the control group on either pre or posttest scores although the control group actually showed a significant loss from pre to posttest.

Interpretation and Conclusions: The evaluative conclusions are that Objective J.2.1 was achieved with the Brittany students but was not achieved with the Hanley students. Thus, for the project totally, the objective was only partially achieved. There is no program information to explain these findings. Reportedly there was some student resistance to the test, but this would not explain the differences between the schools. This evaluator would have more confidence in the conclusions had data been collected for all participating students, however there is no evidence available to question the sample used.

Table 10a

Means, Standard Deviations, and Test of Change on Criterion Measures from Pretest to Posttest for Pupils Enrolled in or Not Enrolled in Career Courses at Hanley School 1972-73

Group	N	Pre		Post		Dep t	DF
		$\overline{X}$	S.D.	$\overline{X}$	S.D.		
Attitude Toward School							
With career course	37	12.72	4.24	21.59	5.84	12.46*	36
Without career course	136	13.08	3.83	22.03	7.04	15.38*	135
Total	281	12.81	4.10	22.66	6.90	25.81*	280
Picture Inventory of Occupational Knowledge							
With career course	38	61.47	14.59	57.92	15.16	-1.40	37
Without career course	144	60.95	13.86	55.26	16.59	-4.52*	143
Total	182	61.06	14.01	55.81	16.34	-4.65*	181
Vocational Development Inventory							
With career course	26	10.19	3.53	10.61	3.29	0.63	25
Without career course	107	9.65	2.82	10.42	2.71	2.60*	106
Total	134	9.69	3.06	10.47	2.82	2.78*	133

*P < .05

Table 10b

Means, Standard Deviations, and Test of Change on Criterion Measures[1/] from Pretest to Posttest for Pupils Enrolled in or Not Enrolled in Career Courses at Brittany School 1972-73

Group	N	Pre		Post		Dep t	DF
		$\bar{X}$	S.D.	$\bar{X}$	S.D.		
Attitude Toward School							
With career course	30	12.63	3.89	21.26	4.93	9.24*	29
Without career course	2	12.50	0.50	20.00	2.00	5.00	1
Total	39	12.46	3.88	21.56	4.77	10.58*	38
Picture Inventory of Occupational Knowledge							
With career course	32	60.21	17.30	65.21	12.11	2.19*	31
Without career course	2	54.50	14.50	88.50	7.50	4.86	1
Total	34	59.88	17.20	66.58	13.09	2.71*	33
Vocational Development Inventory							
With career course	29	11.24	2.51	11.51	2.88	0.48	28
Without career course	3	13.00	1.41	14.66	1.24	0.94	2
Total	32	11.40	2.48	11.81	2.92	0.75	31

*P < .05

[1/] Test of significance of change not meaningful for the "without career course" group due to small n.

Table 10c

Means, Standard Deviations, and Tests of Differences on Criterion Measures between Pupils Enrolled or Not Enrolled in Career Courses at Hanley School 1972-73

Group	with career course			without career course			Indep t	DF
	N	$\overline{X}$	S.D.	N	$\overline{X}$	S.D.		
Attitude Toward School								
Pre test	37	12.72	4.246	136	13.08	3.835	-0.489	171
Post test	37	21.59	5.846	136	22.03	7.049	-0.348	171
Picture Inventory of Occupational Knowledge								
Pre test	40	62.05	14.48	130	61.93	12.80	0.05	168
Post test	40	58.82	15.31	130	55.90	16.23	1.00	168
Vocational Development Inventory								
Pre test	26	10.19	3.53	106	9.60	2.95	0.87	130
Post test	26	10.61	3.29	106	10.44	2.72	0.27	130

* $P < .05$

Table 10d

Means, Standard Deviations, and Tests of Differences[1] on Criterion Measures between Pupils Enrolled or Not Enrolled in Career Courses at Brittany School 1972-73

Group	with career course			without career course			Indep t	DF
	N	$\overline{X}$	S.D.	N	$\overline{X}$	S.D.		
Attitude Toward School								
Pre test	30	12.63	3.894	2	12.50	0.500	0.046	30
Post test	30	21.26	4.932	2	20.00	2.000	0.349	30
Picture Inventory of Occupational Knowledge								
Pre test	32	60.21	17.31	2	54.50	14.50	0.44	32
Post test	32	65.21	12.12	2	88.50	7.50	-2.60*	32
Vocational Development Inventory								
Pre test	29	11.24	2.51	2	12.50	1.50	-0.68	29
Post test	29	11.51	2.88	2	15.50	0.50	-1.89	29

* $P < .05$

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[1] Tests of significance of differences not meaningful for this group due to small n not enrolled in career course.

Statement of the Objective: J.3.1. Junior high students enrolled in the career education courses will demonstrate a significantly more positive attitude toward school upon completion of the course.

Measurement Procedure: Attitude toward school of the Junior high school students was measured with the same instrument used with the Alternative School students. Pre and posttest measures were taken with the participating samples from Hanley and Brittany and a control sample at Hanley. Analysis of gains using a t test were run for each sample and comparisons were made between the Hanley and control samples.

Findings: The results of the evaluative analyses for the Junior high school samples for Objective J.3.1 are reported in Tables 10a, 10b, 10c, and 10d. The participating students at Hanley and Brittany made significant gains in their attitude toward school during the year, but so did the control sample. No difference was found between the attitude scores of the Hanley students and the control group on either the pre or posttest.

Interpretation and Conclusion: This objective stated that the Junior high school students would demonstrate a more positive attitude toward school upon completion of the career education course. The evaluation data clearly support the conclusion that the objective as stated was achieved. The objective was also achieved with the students who had not enrolled in a career education course, consequently there is no evidence that the career education course affected attitude toward school any more than the traditional Junior high school program. In other words, there was no cause and effect relationship found between enrolling in a career education course in Junior high school and change in attitude toward school.

Statement of the Objective: J.6.1. Junior high students enrolled in the career-education course will exhibit an increase in measured maturity of attitudes salient to career decision-making.

Measurement Procedure: The outcomes of this objective were measured with the same modified version of the Crites Vocational Development Inventory (CDI) that was used with the Alternative School students. Outcome analyses included t tests for significance of change in CDI scores from pre to posttest for the Hanley, Brittany and control students. Differences between the pre and posttest CDI means attained by the Hanley students and the control students were also analyzed.

Findings: The results of the outcome analyses for Objective J.6.1 are reported in Tables 10a, 10b, 10c, and 10d . The participating students at neither Hanley nor Brittany showed any change in their attitudes toward career decision making from pre to posttest. The control students did make a significant gain in their CDI scores, but were still at a level not significantly different from that of the Hanley career education students.

Interpretation and Conclusion: The outcome results for Objective J.6.1 support the conclusion that this objective was not achieved at either Junior high school. Comparisons with the control group indicate that the career education course had no effect on career decision making attitudes as measured by the CDI.

Statement of the Objective: G.1.1. Programs for the Senior High and Junior High Components of the project developed around group counseling concepts and procedures will be produced.

Measurement Procedure: This objective was measured through on-site observation, staff interviews, and maintaining documentary records.

Presentation of Findings: The junior high group counseling program was developed during the summer, 1972, and the program was delivered to students during the 1972-73 school year, as specified. This course was developed simultaneously with other summer curriculum writing projects.

During the same period, the course, Group and Student Affairs, was developed for the Alternative School. As reported previously, the summer months saw staff obtained for the Alternative High School. Two guidance counselors were secured for the program, in addition to the counselor who had been with the program since its beginning in January, 1972. These three staff worked with students and other staff members to develop the program.

Interpretations and Conclusion: This objective was met. The processes engaged in followed closely those specified in the project design.

Statement of the Objective: G.1.2. A career counseling program will be developed for the junior high schools.

Measurement Procedure: On-site observation, interviews, and maintaining documentary records were used to assess this objective.

Presentation of Findings: A separate career counseling course was not prepared. The writers and supervisors working on this phase reviewed the junior high courses as they were being written for publication. It was clear that strong guidance elements were being written into the courses. Courses such as Careers in Science, Careers in Home Economics, Exploring Your Potential, and others included built-in activities wherein learners matched their interests and life-goals with the training and activity requirements of a number of occupational clusters, or specific occupations. Therefore, it was concluded that the function of the course specified in the objective was actually being fulfilled through other means.

The Group Counseling Program developed for the junior high school level focused upon learner clarification of his values and interests. The course was a combination of structured study and guided experience with learning groups. The focus of the program has increased learner awareness of (1) his personal values, (2) the value held by others in the group(s), and (3) the effects of one's actions upon others in the learning group(s).

Interpretations and Conclusion: The objective, as stated, was not met. The Group Counseling Program for the junior high school centered around life-space concepts which fit ultimately into career decisions. However, the learning experiences were not focused directly upon the world of work or occupations. That was accomplished within other specially-designed junior high curriculum.

Statement of the Objective: G.1.3. A program for the Alternative School, organized around counseling procedures and techniques, will be developed.

Measurement Procedure: This objective was measured through on-site observation and staff interviews. Documentary records concerning the program development were maintained.

Presentation of Findings: The records indicate:

A program such as Student Affairs was envisioned for the Alternative High School as partial fulfillment of two thrusts designed for the school: student participation in decision-making and the ideal that all project staff fulfill administrative and counseling roles, as well as devise curriculum and provide instruction.

During the pilot test phase of the program (Spring semester. 1972), an attempt was made to secure student involvement in decision-making through holding all-school town meetings. After substantial student participation at the very beginning, student involvement dwindled. By the end of the semester, it was clear that a mechanism to insure student input into substantive decisions had to be designed.

Additional programmatic needs centered around accomplishing the testing program required by the evaluation design, communicating important items among and between students and staff (given that program events would take place at a number of locations), delivering special programs to the entire student body, and other needs were accounted for in the design of the program.

Only one of the four original staff members had designated responsibilities for the counseling program during the spring, 1972 pilot test of the project. When staffing for the project was completed during the summer, 1972, additional credentialed counselors were obtained, bringing the counseling staff for the program to three persons. The Group and Student Affairs Program was designed primarily by this group.

Presented on the following page in Table 11 is an outline of the elements of the senior high group program. It may be seen that appropriate activities were incorporated into Group and Student Affairs.

Interpretations and Conclusion: Process observations and documentary evidence indicate that this objective was met.

TABLE 11

Components of Group and Student Affairs

- I. Career Development Program
- II. Group Counseling
  - A. Interpersonal relationships
  - B. College information
  - C. Development of self-responsibility
    - 1. Behavior: individual - school - classes
    - 2. Learning
- III. Testing
  - A. Project evaluation tests
  - B. Ability tests
  - C. Preference - interest tests
  - D. Student/school evaluations
- IV. Goal Setting Training
  - A. Accountability
  - B. Meeting times
  - C. Short and long term goals
- V. Communications Channel
  - A. Student - Student
  - B. Student - Staff
  - C. Student - Parents
  - D. Staff - Parents
- VI. Student Government
- VII. Behavior Modification and Control
- VIII. Home Visitation Program
- IX. Activities--The general idea is to allow a mutual time arrangement so that many small and large group meetings can be accommodated These activities could be as follows:
  - A. Intramural activities between groups
  - B. Individual and/or group talents
  - C. Speakers
  - D. Recitals--concerts and other resource presentations
  - E. Films--entertainment and educational
  - F. Town meetings
  - G. Planning for trips

Statement of the Objective: G.1.4. The counseling programs will be implemented during the 1972-73 school year.

Measurement Procedure: Measurement for this objective consisted of on-site project observations, staff and student interviews, and reviewing documentation maintained by project and District staff.

Presentation of Findings: Records kept on this objective indicate that:

The junior high group counseling program was presented at Hanley Junior High School to 150 seventh grade students during the year. Due to a reorganization of the School District in Spring, 1973 all sixth and seventh grade students currently attend the Middle School (housed in the Brittany Junior High and Blackberry Lane Elementary School buildings). The course is now offered in the Middle School. In Hanley Junior High School, the function fulfilled by the group counseling program is being approached through a special project.

At the Alternative High School, Group and Student Affairs was implemented substantially as designed. Following the development of the program by counselors, five students, and teaching staff, the plan for the program was presented to the total staff and study body of the Alternative School in September, 1972, where it was ratified.

The program met regularly all year. During the Fall, 1972 semester, Student Affairs was held three times a week. Twice weekly, the groups met in shifts, a third time the entire school met for a two-hour period. In Spring, 1973, the program was modified, and the entire school met simultaneously for two one-hour sessions per week.

Most of the component activities for Group and Student Affairs took place. Counseling, testing, home visiting, and the activities program were generally successful. Recitals presented included a folk dance group, a jazz group, a rock group, and classical guitars. Approximately 15 students took part in the Outward Bound (Stress-Challenge Program). Numerous students took part in the Alternative Schools' Learning Festival Program in April, 1973, sponsored by Webster College.

Short-comings of the program centered around inconsistent attendance by students, resulting in not all students receiving the entire program. It is estimated that 80 percent of the students attended usually or always, and approximately 20 percent attended seldom or never.

Mentioned previously was the difficulty in administering specified evaluation tests, due to a combination of inconsistent attendance, negative student attitude toward testing in general (and some tests in particular), and the lack of a firm mandate that the tests be completed by all students.

With respect to decision-making regarding the operation of the school, student and staff enthusiasm declined during the year. This appeared to be related to a lack of resolution of problems. The commitment to non-authoritarianism and "humane" interpersonal relations manifested itself in this area. Problems brought before the group for resolution sometimes dragged on for lengthy periods of time.

It should be mentioned in connection with this objective that an individual counseling program was carried forward by project staff. The design criteria formulated for the school during the Spring, 1972 semester called for all teachers to provide individual counseling to students when appropriate occasions presented themselves. Mentioned previously was that three project staff were the designated counselors in the school. However, four additional staff members had credentials in counseling, also, and a substantial amount of individual counseling took place.

This resulted in a role conflict during the 1972-73 school year, as the three designated counselors were not informed sufficiently concerning the counseling procedures used with students. A descriptive instrument, The Counselor Contact Log, was designed for the project in the Fall, 1972 in order to (1) assist project counselors to keep up-to-date regarding counseling programs delivered to students by other staff, and (2) generate data for a description of the individual counseling phase of the project. Descriptive data for the Fall, 1972 semester are contained in Table 12.

Interpretations and Conclusions: The program, Group and Student Affairs, was designed by appropriate project staff and students, and it was centered around specific program needs. In most respects, there was a congruence between the intentions of the program and actual outcomes. In those areas where Group and Student Affairs was not successful, the shortcomings seemed to be tied in with problems associated with the operation of the Alternative School as a whole, rather than with any "built-in" weaknesses of the program.

The junior high program was carried forward as planned. It has been continued during the 1973-74 school year to the intended student population, although in a new location.

An individual counseling program was built into the Alternative School. It had consequences for the program in terms of staff role relations, but it seemed to have helped contribute to positive outcomes for students.

The objective was considered to have been met generally, but there were some observed problems related to the program.

TABLE 12

Counseling Trends in the Alternative School

Reason for Contact		Type of Information Collected			Interventions		Outcome			
		School Data*	Parent Report	Student Interview	Counseling: Short Term	Long Term	Resolved	Improved	Not Improved	Continuing
Scheduling	4	1	2	3	1		1	1	1	1
Educational Planning	26	8	4	22	14	3	15	8		3
Career Planning	7	1		5	5	1		4		3
Post-High School Adm./Aid	1						1			
Employment Appl.	1			1			1			
Attitudes and Interests	11	3	2	9	5	2	2	6		3
Personal-Soc. Probs.	22	6	4	18	9	5	6	11	1	4
Other	1		1	1			1			

Contact Initiated By:

	Students	Staff
Male	26	9
Female	23	15
	68%	32%

Referrals

Youth Agency	1
Social Worker	1
Medical	1
Rdg. Teacher	2
Other	2

Evaluation

	Type of Result:			
	Good	Fair	Poor	cont'd.
Scheduling	25%	25%	25%	25%
Ed. Planning	58%	31%		11%
Career Planning		57%		43%
Post-Schl. Adm.	100%			
Employment Appl.	100%			
Attit. & Int.	18%	55%		27%
Pers.-Soc. Probs.	27%	50%	5%	18%
Other	100%			

*Teacher-staff reports
Student Services records
Cumulative file

Statement of the Objective:	G.2.1.	Junior high students served through the program will increase in exhibited level of knowledge regarding pertinent aspects of a variety of occupations, representative of basic occupational clusters.

Measurement Procedure: The evaluation plan designated that the Picture Inventory of Occupational Knowledge be administered during the first and last week of each of the Junior high school career education courses. Analysis of change in the scores on the PIOK was to be made to determine the achievement of the objective. Data were not collected in accordance with this schedule and the only data available to assess this objective are the results of the sample PIOK testing reported under Objective J.2.1.

Findings: See Objective J.2.1

Interpretation and Conclusion: The PIOK data available support the tentative conclusion that Objective G.2.1 was achieved with the Brittany students but was not achieved with the Hanley students. This evidence supports the conclusion that the objective was only partially achieved.

Statement of the Objective:	G.3.1.	Secondary students enrolled in the Alternative School will display a decrease in their stated number of problems related to school.

Measurement Procedure: The Mooney Problem Checklist, a published inventory of student problems, was used to assess change during the year in the number of problems of concern to the Alternative School students. The original evaluation design specified that the number of "school related problems" be analyzed for the assessment of this objective, and that the number of "personal problems" be analyzed to determine the achievement of Objective G.6.2. The evaluation data were reported only as the total number of problems checked on the scale which did not permit conclusions specific to each objective. Therefore, the findings and conclusions reported here are also applicable to Objective G.6.2

Findings: The results of the pre and posttest and the analysis of change are reported in Table 2a. The 55 Alternative School students who completed both the pre and posttest showed a significant decrease in the number of problems that were of concern to them. The pretest mean of 32 problems decreased to a mean of 23 on the posttest.

Interpretation and Conclusion: The evidence available from 55 of the 149 Alternative school students supports the conclusion that Objectives G.3.1 and G.6.2 were achieved. The sample may be questioned due to the permissive procedures used in data collection, and the failure to differentiate the categories of problems in the data report limits the specificity of conclusions that can be supported. However, it is fair to assume that some progress was made during the year in student adjustment, as measured by this scale.

Statement of the Objective:	G.6.1.	Students enrolled in the Alternative School will exhibit a significant, positive increase in their measured level of self-concept.

Measurement Procedure: The achievement of Objective G.6.1 was estimated from pre and posttest measures of self-concept using the Coopersmith Self-Esteem Inventory, Form A. A t test was used to analyze the significance of the observed change.

Findings: The results of the pre and posttest measures of self-esteem and of the t test analysis are reported in Table 2a. The 80 Alternative School students who completed both the pre and posttest showed no change in their self-esteem.

Interpretation and Conclusion: The evidence presented as part of the evaluation design supports the conclusion that Objective G.6.1 was not achieved as stated. The reader should note however, that this conclusion is drawn from group data and that the individual case histories reported in Exhibit I provide some subjective evidence that the program did have considerable impact on the self-concept of some individual students.

Statement of the Objective: G.6.2. Students served through the Senior High Component of the program will display a significant reduction in their indicated number of personal problems.

Measurement Procedure: See Objective G.3.1.

Findings: See Objective G.3.1.

Interpretation and Conclusion: See Objective G.3.1. Objective G.6.2 was considered to have been achieved with some reservation regarding the data reported.

OUTCOMES FOR STUDENTS IN THE ALTERNATIVE HIGH SCHOOL: AN ADDED PERSPECTIVE ON THE EVALUATION

The evaluation design for the project included a combination approach to measuring the objectives. For some, process observations were made and significant events were documented. For others, measurement instruments were applied on a pre- and post-test basis. The second technique was the primary means for measuring student outcomes. This design was appropriate for measuring a program organized around performance objectives which were to be met within a limited time span.

However, the Alternative High School (the senior high component of the program) operated in a flexible and open manner and was centered around the needs and interests of the students. It was most attractive to (1) students who had a hostile attitude toward school and (2) teachers who wished to experiment with new, optional modes of education which allowed them to relate to students in a humanistic fashion.

The evaluation findings were unequivocal in indicating that objectives specifying measured student increases in career knowledge, achievement motivation, and attitude toward school were not met. The process-data presented indicated that an appropriate educational program in these areas was not delivered to a sufficient number of students to register specified gains on the criterion measurement instruments used for measuring these objectives.

Other evaluation evidence indicated that students were absent from school less frequently during the year they were enrolled in the Alternative School; they maintained or increased in their level of academic achievement; and they listed significantly fewer personal problems toward the end of the year than was the case near the beginning.

One of the central concepts in career education is that one's occupation (or career) is a part of an individual's total life style. One's interests, attitudes, abilities and life-style goals are involved in making career choices. The evaluation findings suggest that, in the Alternative School, the program seemed to relate to the broad concept of career education, centering upon the life-style of the learners rather than to the more restricted concept of career education, centering upon occupational awareness, exploration, and preparation. For senior high students who are extremely alienated from school, and who have severe personal problems, the starting point may well be attempting to attain some problem resolution as a means to bringing them back into the mainstream of learning and making decisions for the future.

This conclusion was supported by interviews with Alternative School students and their parents during the year and by testimonial letters written to project staff by these groups.

The project director and several staff noted on numerous occasions during the year that the major impact of the Alternative High School was to be found in the difference made in the lives of the students. These differences, they suggested, might not be detected through pre- and post- paper-and-pencil tests. A substantial number of students expressed this opinion also.

When the evaluation findings from the testing program were analyzed in Summer, 1973, a meeting was held among the State Education Agency staff, the third-party evaluator, and Local Education Agency staff (project staff, an assistant superintendent, and the in-house evaluator). The purposes for the meeting were to (1) review the findings, (2) explore reasons for the failure of the program to meet occupational knowledge objectives, and (3) determine next steps. Previously, in June, 1973, project staff held a series of meetings to review the program. The conclusions from both meetings were similar: career education responsibilities had been left primarily with one individual and there was insufficient delivery of content related to careers and the world of work to students.

However, it was deemed important to provide some data concerning the effect the Alternative High School program had upon students. Program staff and students alike believed that the program's major impact was that it turned students back on to schooling and laid the groundwork for future career knowledge and decisions.

To get at data such as these, Alternative High School staff were asked in September, 1973 to draw upon their files to prepare a set of student case histories. It was believed that such information could describe student outcomes from the program in a way that is more personalized than either a process-summary or a statistical presentation.

In the following section, case histories prepared by program staff are presented. The cases to be reported were not selected at random. Instead, each case represents the various types of students who were enrolled in the Alternative School. Each staff wrote up two or three case histories of students he had worked with most closely during the project, typifying best the student categories.

The categories were: (1) students who had made career choices and used well the resources available through the Alternative School; (2) students who had severe personal/attitudinal problems, which needed resolution before any educational program could be successful; (3) students with severe deficiencies in basic skills; and (4) students who did not use well the opportunities available in the school and avoided meeting course objectives or independent study contracts.

The case histories are presented in Exhibit 1.

EXHIBIT 1

STUDENT CASE HISTORIES

CAREER EDUCATION ALTERNATIVE SCHOOL

Student #1

Age of Student: 18

Grade Level: Senior

REASON FOR ACCEPTANCE INTO ALTERNATIVE SCHOOL:

Student #1 was admitted because he sought work experience as a draftsman-engineer. He seemed to be a student who would take initiative if given the opportunity. He was highly recommended by his teachers and counselors.

NATURE OF PROBLEM(S), IF ANY:

Student #1 was making little satisfying progress towards his goals for two major reasons. First, he lacked personal confidence in his ability to make decisions. Secondly, he was concerned about not going to college. He wanted to enter the engineering field but was concerned that without college he would remain at the "bottom of the ladder."

NATURE OF STUDENT'S RESPONSE TO ALTERNATIVE SCHOOL:

Student #1 responded by participating actively in the decisions of the Alternative School. His decisions affected himself and others directly. He felt that he was making a contribution to our community. And indeed he was. Within our school he was called to use his mechanical skills and physical strength to build and repair useful objects.

I feel that his most successful response was recorded in the Streets and Engineering Department of University City. Here he acquired basic skills and a comprehensive understanding of the role of this department in city government. Equally important is the record that he established with his fellow employees and supervisors. He was offered a full-time job at the end of his senior year.

OUTCOMES AND/OR PRESENT PROSPECTS:

Student #1 is currently employed with a nationwide surveying-engineering firm in St. Louis. He is a member of a surveying team which travels in Southeast Missouri and Illinois. He seems pleased with his present opportunity. Personally, Student #1 has also acquired realistic self confidence in himself. Having known him as a student and neighbor, I feel proud of the accomplishments that he has made and look forward to hearing of his personal and social growth.

CAREER EDUCATION ALTERNATIVE SCHOOL

Student #2

Age of Student: 17

Grade Level: Senior

REASON FOR ACCEPTANCE INTO ALTERNATIVE SCHOOL:

Student #2 expressed a desire to work in a community service program. She has a strong interest in youth work and has served on city and county youth committees.

NATURE OF PROBLEM(S), IF ANY:

I knew Student #2 at the high school and was aware that she felt alienated from her schoolmates and teachers. Often she exhibited chronic depressive behaviors, sitting alone in the hallways with her head buried in her knees. I know that she occupied the attention of the school nurse on many occasions when teachers and staff reported her as "drugged or incommunicable." Other than marijuana smoking I am not aware that she used drugs. On several occasions she passed out in the halls and was physically carried to the nurse's office. She was suffering from anxiety and depression.

NATURE OF STUDENT'S RESPONSE TO ALTERNATIVE SCHOOL:

Student #2 responded by working constructively and in a self-satisfying manner at Youth Emergency Service. Her school behavior was noticeably improved in several ways. She was more often communicative. She began to take more care and consideration in her appearance. She began to develop mature personal relationships with teachers and schoolmates on a more regular basis than she had achieved before.

OUTCOMES AND/OR PRESENT PROSPECTS:

Through much of her own efforts, she received a scholarship to a small liberal arts college in ___________. Her decision and successful acceptance was made with little or no assistance from her family.

CAREER EDUCATION ALTERNATIVE SCHOOL

Student #3

Age of Student: 15 Grade Level: 9th

REASON FOR ACCEPTANCE INTO ALTERNATIVE SCHOOL:

Student #3 articulated orally and in writing her feelings about "being held back" at ________ school. She wanted to learn more, faster. She was uncertain that she would finish school if she was to remain at ______. She sought greater independence from routine schedules and "uninteresting" courses. An individual intelligence test given to her rated her in the 99th percentile.

NATURE OF PROBLEM(S), IF ANY:

Student #3 is chronically depressive and has been overly concerned about self-destruction for 12 to 18 months. The death of her father around that time may be a factor in the intensity of her feelings, but I have been unable to talk about this with her. Her mother and I have been trying to get her to accept psychiatric intervention during the past year; she has refused.

Student #3 is exceptionally self-critical and lacks sufficient self-confidence in herself and the decisions that she makes.

NATURE OF STUDENT'S RESPONSE TO ALTERNATIVE SCHOOL:

I feel that Student #3 has proven to be the single most responsible and committed student that we have in our school. Her contributions have been across the board; hard physical work, creativity and determination. Her behavior, manic if not obsessive at times, is aimed at making the Alternative School a success. She has not neglected her own academic growth but she has, in my opinion, completely identified herself with the Alternative School.

OUTCOMES AND/OR PRESENT PROSPECTS:

Student #3 wants to be a writer. She also wants to work in the Peace Corps or some other service organization. At 15 she has a powerful vocabulary and growing ability to express herself literally. I feel that she can be as successful as she wants to be.

CAREER EDUCATION ALTERNATIVE SCHOOL

Student #4

Age of Student: 17 Grade Level: 12

REASON FOR ACCEPTANCE INTO ALTERNATIVE SCHOOL:

Student #4 was "dissatisfied with schooling." It was "not taking him where he wanted to go, in terms of his chosen career and interests."

NATURE OF PROBLEM(S), IF ANY:

School work seemed to suffer because of its lack of personal application for him, and his corresponding disinterest. Student #4 had poor attendance and poor grades.

NATURE OF STUDENT'S RESPONSE TO ALTERNATIVE SCHOOL:

Student #4 responded to the Alternative School as he had planned: with independent and community studies. In order to go on to his desired career of forestry and wild life studies, he decided that the most urgent need was earning money. He worked at a steady job from 11 to 6 every day for which he received high school credit along with independent study in career development. From 8:30 to 10:30 he studied his hobby interests of world religions and music (a talented pianist) and weekends he spent in the country.

OUTCOMES AND/OR PRESENT PROSPECTS:

Student #4 was accepted by Syracuse University where he will concentrate on forestry. In written testimony, he has eloquently thanked the Alternative School for "straightening him out" and encouraging him in his fields of interest.

CAREER EDUCATION ALTERNATIVE SCHOOL

Student #5

Age of Student: 17

Grade Level: 11

REASON FOR ACCEPTANCE INTO ALTERNATIVE SCHOOL:

Student #5 was an outstanding student in two chief areas: music and creative writing. He wanted to concentrate heavily, and in his own style, on these subjects.

NATURE OF PROBLEM(S), IF ANY:

Student #5 was highly motivated and self-directed; he needed space for personal expansion, a chance to work without external pressures and confining limitations.

NATURE OF STUDENT'S RESPONSE TO ALTERNATIVE SCHOOL:

Student #5 blossomed in every way in the School's first semester. He was graduated at the end of his junior year and accepted as a teacher's aide in the school for the following year. While still a student, he edited the school poetry magazine, taught courses for his peers in music and writing, grew in confidence and productive efforts.

OUTCOMES AND/OR PRESENT PROSPECTS:

After a successful teaching year in which he was accepted as a fully participating staff member (under the joint supervision of certified English and math teachers) and was appreciated by his students and colleagues for his talent, responsible behavior and his originality and humor, Student #5 was accepted by Antioch College, the Universities of California and Indiana, and New English Conservatory. After careful deliberation and visits, he chose the latter.

CAREER EDUCATION ALTERNATIVE SCHOOL

Student #6

Age of Student:_____ Grade Level: 9

REASON FOR ACCEPTANCE INTO ALTERNATIVE SCHOOL:

Student #6 was unhappy in Junior High School because it "did not have the courses leading toward" her main interests which were child care and nursing. Was "not doing well in school" because "no cooperation from the students, and the teachers don't try."

NATURE OF PROBLEM(S), IF ANY:

Student #6 was pregnant at the time school began in the fall, and she was uncertain how school would respond. Student #6 was careless in personal grooming, generally unhappy and fearful. She left school for the last few months of pregnancy.

NATURE OF STUDENT'S RESPONSE TO ALTERNATIVE SCHOOL:

Student #6 was encouraged to keep in touch with school. After baby's birth, she returned on a part-time basis, gradually working back to full-time. She often brings her baby to school. She became intensely concerned with child development study, in relation to the child's growth.

OUTCOMES AND/OR PRESENT PROSPECTS:

Student #6 has become increasingly more attractive and confident in her manner. She expresses interest in continuing in some field of child care, probably nursing, and intends to go on to junior college. She voluntarily attended summer meetings to discuss opening a child center at the school.

CAREER EDUCATION ALTERNATIVE SCHOOL

Student #7

Age of Student: 17 Grade Level: 11

REASON FOR ACCEPTANCE INTO ALTERNATIVE SCHOOL:

Student #7 was accepted because he had an attendance problem at the Senior High School, and thought that he could improve at the Alternative School.

NATURE OF PROBLEM(S), IF ANY:

Student #7 is in constant conflict with parents and sister. He often lives with friends without parental permission, for various periods of time.

NATURE OF STUDENT'S RESPONSE TO ALTERNATIVE SCHOOL:

Student #7 comes to school, but fails to come to class on a regular basis. He performs well academically when in attendance.

OUTCOMES AND/OR PRESENT PROSPECTS:

A written commitment has been made by Student #7 to attend classes on a regular basis, and he is being counseled closely.

CAREER EDUCATION ALTERNATIVE SCHOOL

Student #8

Age of Student: 18

Grade Level: _________

REASON FOR ACCEPTANCE INTO ALTERNATIVE SCHOOL:

Student #8 was unhappy with atmosphere at high school. His achievement was under ability. He wanted more opportunity to work independently.

NATURE OF PROBLEM(S), IF ANY:

Student #8 set up independent goals and individual schedule, but the amount of work done was not adequate to meet goals. He wanted to blame others for his inadequate performance.

NATURE OF STUDENT'S RESPONSE TO ALTERNATIVE SCHOOL:

The staff held firm expectations for Student #8. He displayed acting-out behavior and attempted to do some "wheeler-dealing." Eventually, Student #8 realized he would be unable to receive credit for performing inadequately.

OUTCOMES AND/OR PRESENT PROSPECTS:

Student #8 conformed to requirements. He graduated and is now in college. Prospects for college success are good.

CAREER EDUCATION ALTERNATIVE SCHOOL

Student #9

Age of Student: 17

Grade Level: 11

REASON FOR ACCEPTANCE INTO ALTERNATIVE SCHOOL:

Student #9 was unable to perform academically at high school. He had attendance problems and was known to be on drugs.

NATURE OF PROBLEM(S), IF ANY:

Student #9 was often "strung out" on pot and drugs, was unable to concentrate. Attendance was poor. Student #9's academic achievement was very poor.

NATURE OF STUDENT'S RESPONSE TO ALTERNATIVE SCHOOL:

Student #9's attendance was improved for several months. The principal, especially, and several staff gave Student #9 special attention and encouragement. Toward the end of the year, Student #9 was absent more than he was present. Occasionally, he was a disruptive influence on other students.

OUTCOMES AND/OR PRESENT PROSPECTS:

Student #9 was given an ultimatum re: commitment for this year. He is in the process of deciding. Prospects poor for behavior change at this point.

CAREER EDUCATION ALTERNATIVE SCHOOL

Student #10

Age of Student: 18 Grade Level: 12

REASON FOR ACCEPTANCE INTO ALTERNATIVE SCHOOL:

Student #10 was unhappy with structure at high school and wanted more opportunity to direct her own learning. Her leadership potential was ripe but unused at high school.

NATURE OF PROBLEM(S), IF ANY:

Student #10 has family problems. She lived with her sister, brother-in-law, and their six-year old son. Student #10 has an extremely hostile relationship with her mother, and only a slightly better feeling toward her sister.

NATURE OF STUDENT'S RESPONSE TO ALTERNATIVE SCHOOL:

Student #10's academic achievement was outstanding. She displayed leadership behavior and influenced other students. She was concerned about quality of school, and she worked on several committees for improvement and problem solving.

OUTCOMES AND/OR PRESENT PROSPECTS:

Student #10's home problems increased. Her sister kicked her out and she had to return to living with her mother. Emotional deterioration followed. Counselors, social worker and school nurse attempted intervention with little success. The student was admitted to Jewish Hospital for psychiatric hospitalization. A stay of several months resulted in some improvement, but Student #10 was unable to work out problems with her mother. A counselor arranged alternate living arrangements and the student is settled with that family. Student #10 is now in college on a scholarship and making adequate adjustment.

CAREER EDUCATION ALTERNATIVE SCHOOL

Student #11

Age of Student: 16

Grade Level: 10

REASON FOR ACCEPTANCE INTO ALTERNATIVE SCHOOL:

NATURE OF PROBLEM(S), IF ANY:

#11 had skill deficits in reading and the other communication skills; non-performance in those academic classes requiring reading and writing skill; and non-attendance in classes where he could not accomplish assignments.

NATURE OF STUDENT'S RESPONSE TO ALTERNATIVE SCHOOL:

#11 was assigned to the Individualized Reading Program at the Alternative School. A teacher-student contract was developed in which course credit was contingent upon regular attendance and completed assignments in academic courses.

In the reading program, a tutor was assigned to the student. Reading instruction was reinforced and help with course work was given.

All writing projects were completed by the second quarter. #11 was absent only five times during the program. His skills improved in specific areas: sentence comprehension, organizing paragraphs, and selecting appropriate reference materials for report writing.

OUTCOMES AND/OR PRESENT PROSPECTS:

The student is enrolled currently in the Individualized Reading Course, and the prospect is good for 100 percent attendance.

CAREER EDUCATION ALTERNATIVE SCHOOL

Student #12

Age of Student: 16

Grade Level: 10

REASON FOR ACCEPTANCE INTO ALTERNATIVE SCHOOL:

Student transferred from private alternative school.

NATURE OF PROBLEM(S), IF ANY:

Student #12 had gross skill deficits in reading and writing. Sentence comprehension and sentence writing were assessed at less than 50 percent of any given piece of reading material.

NATURE OF STUDENT'S RESPONSE TO ALTERNATIVE SCHOOL:

The student enrolled in the Individualized Reading Course, wherein she planned her own objectives; strategies for "reinforcement teaching" were planned by the instructor. A tutor from a nearby college assisted Student #12 twice each week, and the instructor worked with the student four times per week, for one hour instructional periods.

OUTCOMES AND/OR PRESENT PROSPECTS:

By the final quarter, the student had completed reading two novels with full comprehension and had completed two written reports for academic classes, assessed at 100 percent in organizational skill.

The instruction was based on student-centered objectives, and instructional procedures and materials were undertaken with the student's agreement. The change in performance was radical, and continued progress is expected.

CAREER EDUCATION ALTERNATIVE SCHOOL

Student #13 and Student #14

Age of Student: Student #13 is 15
Student #14 is 17

Grade Level: #13 - Grade 10
#14 - Grade 12

REASON FOR ACCEPTANCE INTO ALTERNATIVE SCHOOL:

TWO STUDENTS ARE REPORTED TOGETHER, AS THEIR PROBLEMS SHARE MUCH COMMON TERRITORY.

Both students were alienated from school and had poor attendance records. #13 expressed a desire to try to understand other people, and herself, better.

NATURE OF PROBLEM(S), IF ANY:

Both students had a poor academic achievement record; both exhibited a severe lack of confidence. Both students avoided social contacts, except for one another.

#13 exhibited extreme sensitivity and seemed very dependent on her family.

#14 exhibited severe problems in dealing with authority.

NATURE OF STUDENT'S RESPONSE TO ALTERNATIVE SCHOOL:

#13: at first, she was negative toward school in any form, expressing a desire to "drop out." With counseling and urging by staff members, she remained in school. Gradually her attitude became quite positive, and she received recognition, while improving in her course work. She became less and less dependent upon #14, and during the year broke off the friendship.

#14: Remained a loner, with the exception of #13. Refused to dress appropriately for job interviews. She responded well to individual attention from staff members, but never completely became a part of school involvement. She made very good progress in overcoming deficiencies in reading skills, and her progress in course work improved during the second semester.

OUTCOMES AND/OR PRESENT PROSPECTS:

#13: returned to the Alternative School for the junior year. She is seeking new friendships, and has begun to make preliminary decisions regarding post-graduation plans.

#14: dropped out of school although requirements for graduation were almost completed. She has enrolled in an adult evening school to complete a high school equivalency program. This was done upon reaching age 18. #14 has obtained a job with a local business, and follow-up is planned.

(f) Conclusions, Implications, and Recommendations.

Conclusions: Conclusions drawn from the evaluation of the project consisting of process-analytic data and results of test administrations indicate that:

1. For the junior high school component, career education curricula were developed and the courses were given to students. The courses were offered on an elective basis, or they were infused into traditional academic subjects. In both junior high schools, measured attitude toward school increased for students who had taken career courses. However, it also increased for those who had not in one of the schools. Students in one school who had taken career education courses demonstrated increased career knowledge.

2. For the guidance and counseling component, both the junior high group counseling course and the Alternative School program were developed and used during the year. The junior high program is being delivered in the Middle School in 1973-74, and group and student affairs is being continued in the Alternative School for 1973-74.

3. For the senior high component, the processes specified for setting up the Alternative School (in the project design) were followed. During each of the three semesters of the project, activities such as student enrollment and development of original curricula were performed. The school operated from several locations during the year.

   Students in the school demonstrated improved attendance and academic performance, as well as an expressed decrease in personal problems. However, they failed to demonstrate substantial increase in career knowledge or career planning.

   It was concluded that the student failure to demonstrate significant gains in objectives related specifically to occupational knowledge and attitude toward career planning was a result of insufficient delivery of an educational program that would bring about these outcomes. There were apparent positive outcomes for students which were not measured through the means employed to evaluate the project. These related to beginning to resolve personal problems and negative attitudes. For the student population enrolled in the school this was a necessary first step, before career education or any education program could be successful.

4. Associated with the failure to implement career education learnings throughout the program (leaving this largely up to one individual) was the apparent commitment to the

flexible and open educational arrangements in an Alternative School on the part of several full-time staff and part-time aides and volunteers, at the expense of specified project objectives.

The staff worked hard, often working through vacations and putting in many hours in excess of the school day. However, the apparent divergent viewpoints regarding the amount of structure needed in the program seemed to reduce efficiency in reaching important program objectives.

Implications: Implications drawn from experience with this project were:

1. Both career education and alternative education are assuming the proportions of "movement" in education on the national scene. An alternative school may take many forms. However, most are distinguished by a commitment to learner exploration in a personal, experimental way; optional curricula tailored to student perceived needs; and commitment to humanistic relationships.

   Whether a school program organized along such lines is incompatible with career education or not was not answered conclusively through this project. The fact that the student population in the school was drawn largely from available secondary students who were turned off from traditional education makes it difficult to answer this question. The difference in level of commitment to the program goals among staff and students joining the project after the one semester trial period also makes it difficult to reach unequivocal conclusions.

2. The results suggest strongly that for a project, developed to meet specific objectives within a time limit, to succeed all persons involved must be aware of the objectives and committed to their attainment.

3. The literature on career education emphasizes the points that community resources should be used and the educational program should be relevant. Experience from this project suggests that for students who are antagonistic toward formal education in all forms, the first step is to restore confidence in the possibility that school experiences can make a difference. A school organization which emphasizes student and teacher mutual learning and de-emphasizes formalistic role relations may be a pre-condition for a successful career education program. Thus, the "relevancy" of a career education program may differ according to the intended student population.

Recommendations: The recommendations which would be made from the findings include: (1) that the School District continue the successful aspects of the program; (2) that the school be moved to appropriate facilities; (3) that the curriculum and instruction include appropriate career education emphases; (4) that all staff and students be aware of and committed to career education aims; and (5) that the School District re-evaluate the program, centering attention upon those objectives not met during the term of the project.

At the time this report was prepared, these recommendations had been implemented already. As soon as the program outcomes became known, the following steps were taken:

1. The Alternative School was moved from its outside location to the Ward Building, within the School District. Adequate classrooms and laboratory space and other facilities are available there to develop the program.

2. Faculty who left the program at the end of the project year were replaced by persons who are expected to strengthen the school and to move it forward along the lines of the original program intent.

3. The curriculum has been revamped to incorporate career education concepts and information within each course offered to students.

4. The counseling function will continue to be fulfilled by teachers and counselors, with assistance from community resources and group counseling opportunities. The school will continue to serve 150 students.

5. The expectation that career education will be emphasized in the program was strongly stated to students and staff.

6. The District will undertake a partial replication of the evaluation design, and those program weaknesses revealed in this report will be re-evaluated in 1973-74.

7. The production and implementation of career awareness curricula in the junior high will be continued.

It appears that the term of the project represented a trial period and that appropriate corrective actions were taken. The program seems now to be at a point where it will be possible to move forward to attain those objectives not met in 1972-73.

Third Party Evaluator Conclusions and Recommendations

The third party evaluator participated actively in the (1) formulation of objectives for the project; (2) development of the evaluation design; (3) selection and/or development of instruments for the measurement of outcomes; and (4) analysis and reporting of results for thirteen of the outcome objectives. The local evaluator worked with the independent evaluator in the planning and design of the evaluation, and had full responsibility for (1) collecting the evaluation information, (2) transmitting student outcome data to the independent evaluator, and (3) preparing the descriptive report and the documentation necessary for the assessment of the twelve process objectives. The descriptive summary of process and outcomes prepared by the local evaluator (pages 1-6) is, to the best knowledge of this evaluator, essentially accurate. Also, the conclusions and recommendations presented therein are generally defensible on the basis of the information available. This evaluator agrees in general, but not in all specifics, with this part of the final report. Such differences as may exist are probably the result of the vantage point from which each evaluator assessed the project, and from the extremely difficult task of trying to arrive at conclusions, plausible explanations, and practical recommendations from the analyses of outcomes for 25 objectives, within six goal categories, for three program components. At best anything resembling an integrated report that may be useful for future administrative and program decisions is open to debate.

This evaluator has made an attempt to summarize the evaluation by goal categories, objectives, and program components. This summary is based upon (1) site visitations and discussions with the staff, (2) a careful study of all documentary reports, (3) statistical analysis of student outcome data, and (4) this evaluator's independent conclusions with respect to the achievement of each of the 25 process and outcome objectives. A summary of the third party evaluator's conclusions with respect to the achievement of each objective is presented in Table 13 . The percentage of success, or "hit rate," of the project in achieving objectives and goals by each component was also computed in an attempt to provide evidence for overall conclusions. The evaluation data were used to support one of three conclusions regarding each objective: (1) fully achieved, (2) partially achieved, or (3) not achieved. A degree of subjective judgment entered into many of these conclusions due to limited samples, possible faulty data, and the subjectivity of some data. The independent evaluator assumes full responsibility for these conclusions and the interpretation of the evidence supporting them.

Table 13

Summary of Evaluation Conclusions by Goal Category and Project Component

Goal Category	Objective Number	Component			Percent of Objectives Achieved by Goal Category and Component		
		Alternative School	Junior High School	Guidance	A	P	N
Program Development	S.1.1	P			0.0	100.0	0.0
	S.1.2	P					
	J.1.1		A		50.0	50.0	0.0
	J.1.2		P				
	G.1.1			A	75.0	0.0	25.0
	G.1.2			N			
	G.1.3			A			
	G.1.4			A			
Career Knowledge	S.2.1	N			0.0	33.3	66.7
	S.2.2	N					
	S.2.3	P					
	J.2.1		P		0.0	100.0	0.0
	G.2.1			P	0.0	100.0	0.0
Attitude Toward School	S.3.1	N			33.3	0.0	66.7
	S.3.2	A					
	S.3.3	N					
	J.3.1		A		100.0	0.0	0.0
	G.3.1			A	100.0	0.0	0.0
School Achievement	S.4.1	A			100.0	0.0	0.0
Attitude Toward Work	S.5.1	N			0.0	0.0	100.0
Self Concept	S.6.1	NI			50.0	0.0	50.0
	S.6.2	N					
	S.6.3	A					
	J.6.1		N		0.0	0.0	100.0
	G.6.1			N	50.0	0.0	50.0
	G.6.2			A			
Percent of Total	A	25.00	40.00	62.5		40.0	
	P	25.00	40.00	12.5		24.0	
	N	50.0	20.00	25.0		36.0	

Legend: A = Fully achieved
P = Partially achieved
N = Not achieved
NI = No information
S = Alternative School
J = Junior High School
G = Guidance

The following general conclusions regarding the achievement of project goals and the success of each project component are supported by the evaluation findings: (See Table 13 .)

Goal Achievement:

1. The program development goals for the entire project were achieved reasonably well, during 1972-73, with four (4) of the eight (8) objectives under this goal category being fully achieved, three (3) partially achieved, and only one (1) not achieved. This conclusion differs, however, with the different components of the project. The program development objectives were achieved more fully within the guidance component (three (3) objectives fully achieved and one (1) not achieved), than in the Junior high school component (one (1) objective fully achieved and one (1) partially achieved), or the Alternative School component (both objectives only partially achieved).

2. The career knowledge goals were not achieved well by the project. None of the five objectives was fully achieved, two (2) were not achieved, and three (3) were partially achieved. Again there were differences among the three project components. The Alternative School had three (3) career knowledge objectives and ended the year having failed to achieve two (2) of these and only partially achieving the third. The Junior high school and Guidance components partially achieved their respective career knowledge objective.

3. The Attitude toward School goals were well achieved in the Junior high school and Guidance components (each component objective fully achieved), but not well achieved in the Alternative School component (two objectives not achieved and one, improved attendance, fully achieved). Although not a part of the planned evaluation, the low dropout rate of the Alternative School group, and the subjective case reports, suggest that this objective may have been achieved somewhat better than the group analysis data would indicate.

4. The school achievement goal was fully achieved. The Alternative School student made gains in achievement, during the year, equal to or greater than might have been expected from national norm standards.

5. The project did not achieve the objective in the attitude toward work goal category. This objective applied only to the Alternative School component and the results are consistent with the failure to achieve the career knowledge objectives.

6. The Self Concept goals were not well achieved. There was relatively little evidence to indicate that the project produced any significant change in student self concepts. This conclusion is based on the objective measures of self concept. There is some question whether Objective S.6.3 should be considered a self concept objective and Objective G.6.2 might more appropriately be described in terms of student adjustment rather than self concept.

Comparison of Component Achievement of Objectives:

1. The guidance component was the most effective of the three project components in achieving both process and outcome objectives. Overall 62.5 percent of the guidance objectives were fully achieved and 25 percent were not achieved. The guidance component achieved 75 percent of its program development objectives, and fully achieved both objectives related to student adjustment (reduction of expressed student problems).

2. The Junior high school component was reasonably successful with an overall record of 40 percent of the objectives fully achieved and another 40 percent partially achieved.

3. The Alternative School component was the least successful of the project components in achieving their stated objectives. Only 25 percent of these objectives were fully achieved and 50 percent were not achieved. The school achievement outcomes were clearly the most convincing evidence that the Alternative School achieved a goal related objective. The other two fully achieved objectives related to school attendance and to the post-school activities of their students, the achievement of which are difficult to attribute primarily to the project. Ironically the objectives achieved most fully by the Alternative School are in many ways quite traditional with few elements that might be considered unique to the primary emphases of the Alternative School.

Overall Evaluation Conclusions:

1. The project was not as successful as might have been expected in meeting the process and outcome goals and objectives. The record across all goals and objectives showed that 40 percent of the 25 objectives were fully achieved, 24 percent partially achieved, and 36 percent were not achieved.

2. The project program was implemented essentially as planned. Some of the staffing problems noted by the local evaluator may be a partial explanation of the inconsistencies between the achievement of process and outcome objectives.

3. The career development program emphasis of the project proposal was not demonstrated in the student outcomes nor the Alternative School program development. The failure to achieve objectives in the career knowledge and attitude toward work goal categories indicates that (1) the career education program was not implemented, or that (2) the career education activities were not effective in changing the career development of the students, as measured in the evaluation. The project outcomes indicate that it was least successful in the area proposed as the primary purpose for the project, namely the career development of students.

General Observations and Recommendations:

1. The career development aspects of the project should be assessed critically with particular attention to specific student behaviors, knowledges, and understandings. The failure of the 1972-73 program to demonstrate an impact on student career development might be due, in part, to the gap between the nature of the specific program activities and the nature of the career development characteristics measured in the evaluation process. In the absence of this kind of careful restructuring, this evaluator believes that the project has little justification for a career education designation.

2. The descriptive data collected for evaluation purposes, as well as the outcome analyses should be used for the identification of student needs and specific strengths and weaknesses of the program. These data can be helpful in programmatic decisions. The 1972-73 evaluation data were not collected and processed according to schedule, thus limiting the use of pretest data for inprocess decisions, and the posttest data for 1973-74 program decisions. A comprehensive evaluation can be an invaluable aid for program improvement or it can be an unwelcome and threatening necessity to meet grant requirements.

3. The independent evaluator generally agrees with the local evaluator's specific recommendations with regard to facilities and staffing.

4. This project seemed at times to be focussed upon an unspecified set of objectives somewhat removed from the career development objectives stated in the proposal and the evaluation design. The functional objectives and outcomes of the project may therefore have been ignored in the evaluation design. If this is true, favorable outcomes with respect to the objectives evaluated could be expected only by chance, and the true outcomes and perhaps the greatest values of the project might escape the evaluation process and adequate recognition in reports. The project staff may, therefore, want to consider a restatement of objectives to bring expected outcome in a closer alignment with actuality. For example, there may well have been unspecified outcomes related to social responsibility, interpersonal communication, or creativity, that were in no way measured by the career development outcomes examined in this evaluation. This is not an argument for the priority of one objective over another, but rather a plea for straightforward explicit statements of objectives that are consistent with program operation.

APPENDIX 1

BEHAVIORAL OBJECTIVES FOR THE CAREER DEVELOPMENT PROJECT

Behavioral Objectives: Career Development Project
School District of University City, Missouri

Defined for the project were three components: Senior High Component, Junior High Component, and Guidance and Counseling Component. Six categories of objectives were developed for the program components. The categories are:

1.0 Program Development
2.0 Career Knowledge
3.0 Attitude Toward School
4.0 School Achievement
5.0 Attitude Toward Preparing for the World of Work
6.0 Self-Conceptualization as a "Career Conscious" Individual

Senior High Component

Program Development Objectives (1.0)

Objective S.1.1-- An educational program for secondary school students, which has as its basis an organization centered around topics related to career education, will be developed within the school system and offered to students as an alternative to the secondary education program offered currently in the schools. A distinctive feature of this program will be student involvement in making critical decisions related to the program.

Operational Definition: A school program centered around career education, which includes critical decision making by students and staff and the incorporation of alternative learning modes, will be developed; it will be installed within the school system, and it will be housed in appropriate facilities.

Criterion Measures: Criterion measures will consist of documentary records maintained by the project which record pertinent activities carried on by program personnel in pursuit of attaining this objective. The documentation will be preserved for review and reporting to appropriate target groups and/or agencies.

Evaluation Criteria: The existence of the Alternative School will be documented by criterion records demonstrating the existence of: (1) a student body; (2) a faculty; (3) curricula; (4) critical student and staff involvement; and (5) site(s) housing the school.

Documentation of significant activities and critical events maintained for noting the attainment of this objective should include:

(1) program development

(2) staff recruitment

(3) student body recruitment

(4) development of operational procedures

(5) development of curricula from the perceived needs of students

(6) documentation of the following program-related activities:

  (a) within-school activities

  (b) field observations related to careers

  (c) seminars in career development

  (d) work-study field experiences

Objective S.1.2 -- Instructional programs, approaches, or similar educational modes will be developed for the Alternative School.

Operational Definition: Instructional procedures; curricula; or similar demonstrable educational activities which are designed to increase (1) student's career knowledge; self-knowledge in terms of "career consciousness" (including intensive investigation of one's attitudes, preferences, and future goals with respect to the world of work); and (2) for those students who enter the program with a set of career goals clearly developed, a program for investigating intensively the specific skills, training, or similar requirements necessary to qualify for the occupation of their choice, as well as a consideration of the economic, social, and personal consequences stemming from entering a given occupation, or occupational cluster.

Procedures for incorporating instruction such as is described above will be developed by cooperative efforts of teams of persons. The teams will be composed of project staff, students in the school, school personnel, parents, and representatives of local business and industry.

Criterion Measures: Documentary records of meetings, workshops, and other task-related sessions engaged in by the teams described above which result in the production of such instructional programs will be maintained for review.

Evaluation Criteria: The production of syllabuses, course outlines or guides, or other curriculum materials in writing related to this objective will demonstrate that the objective was attained. Furthermore, the production, utilization, and dissemination to other secondary schools of these materials will be documented. Such documentation will provide evidence for describing the extent to which the objective was met.

Career Knowledge Objectives (2.0)

Objective S.2.1-- Secondary students served through this program will demonstrate an increase in the level of knowledge they exhibit regarding pertinent aspects of a variety of selected occupations, which represent basic occupational clusters.

Operational Definition: The mean level of knowledge exhibited by students toward aspects of selected occupations will increase to a statistically significant extent. These aspects include (1) educational requirements; (2) working conditions; (3) economic rewards; (4) life style; and (5) social consequences.

Criterion Measures: Change scores will be analyzed for the students' performance on the instrument, Vocational Knowledge Inventory (Fraser, University of Missouri, Columbia).

Evaluation Criteria: The group mean scores on the post-test will be greater than the mean scores on the pre-test, to at least the .05 level of confidence, or less.

Objective 8.2.2 -- The students served through the program will demonstrate a significant increase in their measured level of vocational maturity.

Operational Definition: The mean score attained by the group of students served through the project on a post test of an instrument designed to measure vocational maturity will increase over the pretest.

Criterion Measure. The instrument used to measure vocational maturity will be Section II and Section III (items 41-100 of the *P.E.C.E. Knowledge Test*; Georgia State Department of Education, revised January, 1971).

Evaluation Criteria: The group mean score of students in the program will increase on the post-test of Sections II and III of the P.E.C.E. *Knowledge Test* over the mean score on the pre-test to a statistically significant extent (P = .05 or less).

Objective S.2.3-- Students served by the project will take part in training and/or actual work experiences.

Operational Definition: Students will be placed in work experiences to be arranged for by project staff.

Criterion Measures: Documentary records maintained by project staff containing, on a student by student basis, a record of work experiences or in-house career-training sequences will form a basis for measuring this objective.

Evaluation Criteria: The objective will be considered as having been met if at least 60% of career development students take part in work experiences, or receive training within the program directed toward basic job hunting and job maintenance skills, study skills, business training, or pre-professional training.

Attitude Toward School Objectives (3.0)

Objective S.3.1-- Students served through the program will demonstrate a significantly more positive attitude toward school during the term of the project.

Operational Definition: The mean score of students enrolled will increase significantly on a post-test of an instrument designed to measure students' attitudes toward school compared with their obtained mean scores on a pre-test administration of the instrument.

Criterion Measures: The instrument used on a pre and post-test basis to measure this objective is the Attitude Toward School Scale, developed especially for this program.

Evaluation Criteria: An increase significant to at least the .05 level of confidence on the post-test administration of the Attitude Toward School Scale, between the group mean score on the pre-test and the group mean score on the post-test will document the attainment of this objective.

Objective S.3.2-- Students enrolled in the program will demonstrate improved attendance rates and rates of remaining in school.

Operational Definition: For those students enrolled in the Alternative School, the frequencies of days present, days absent, and times tardy will be recorded for (1) the year immediately prior to their enrollment in the Alternative School and (2) the year during which they were enrolled in the Alternative School. The mean number of days present for the group will increase significantly, and the mean number of days absent and times tardy will decrease significantly. All students enrolled will not drop out of school during the term of the project.

Criterion Measures: For the group as a whole, the mean number of days present during the term of the project will be greater to a statistically significant extent ($P = .05$, or less) when compared with the mean number of days present for the same students during the year immediately prior to their entrance in the Alternative School. Conversely, the group mean number of days absent and number of times tardy will decrease to the same level of significance during the year in which they were enrolled in the program, compared with the previous year.

Evaluation Criteria: The criterion measure for significance of difference is the .05 level of confidence, or less when a t-test for correlated means is applied to the group means for the enrollment data described above on a pre-entrance and end of the 1972-73 school year basis.

Objective S.3.3-- Students enrolled in the program will demonstrate an increased level of achievement motivation.

Operational Definition: The mean scores of students in the program on a post-test administration of an instrument designed to measure students achievement motivation will increase signficantly over their mean score on a pre-test.

Criterion Measures: The instrument used to measure attainment of this objective will be Student Attitude Survey (I. Russell, University of Missouri-St. Louis).

Evaluation Criteria: The objective will be considered to have been met if the mean score of students on the post-test is significantly greater (P = .05, or less) than the group mean on the pre-test on the Student Attitude Survey.

School Achievement Objectives (4.0)

Objective S.4.1-- Students enrolled in the Alternative School will increase, or at least not decrease in measured levels of achievement in academic subjects.

Operational Definition: The achievement level of students enrolled in the program, as measured by a standardized test in academic subjects (e.g., math, English, etc.) will (1) increase, or (2) not decrease, during the term of their enrollment in the program.

Criterion Measures: Student performance will be measured by the administration of selected subtests of an appropriate form of the CTBS administered at the beginning and near the end of the school year.

Evaluation Criteria: Students enrolled in the Alternative School will (1) increase or (2) at least maintain their relative position for their norm group in terms of their standard score, within the range of the standard error of measurement, for each of the sub-tests of the CTBS administered on a pre- and post-tests basis.

Attitude Toward Preparing for the World of Work Objectives (5.0)

Objective S.5.1-- Students enrolled in the Alternative School will exhibit an increased positive attitude toward engaging in planning for entering the world of work.

Operational Definition: Students enrolled in the program will exhibit measurably significant increases in their attained mean scores on a post-test of an instrument designed to measure the value students place upon gaining preparation for entering the world of work, compared with their scores on a pre-test of an instrument and compared with the pre- and post-scores on the same instrument from a random sample of 10 percent of the secondary students in the school system, not enrolled in the program.

Criterion Measures: The instrument used to measure students' behavior for this objective will be an appropriate subsection of the Vocational Development Inventory, Form IV,(Crites, University of Iowa, 1966).

Evaluation Criteria: The mean score for students enrolled in the program on the post-test of the subsection of the Vocational Development Inventory will increase over the mean score on the pre-test administration to a measurably significant extent ($P = .05$, or less).

Furthermore, the mean score of the post-test for those students enrolled in the program will be greater to a measurably significant extent ($P = .05$, or less) than the post-test mean of a random sample consisting of 10 percent of the secondary students in the school system who are not enrolled in the program.

The differential (i.e., gain scores) between the scores on the pre-test and post-test will be significantly greater ($P = .05$, or less) for those students enrolled in the program compared with the sample of students not enrolled.

Self-Conceptualization as a "Career Conscious" Individual Objectives (6.0)

Objective S.6.1 - Students in the program will demonstrate an incremental amount of career "planfulness."

Operational Definition: Students will work out cooperatively with project staff a sequence of plans, career choices, and education and work experiences which appear to be related logically to the students' stated career goal.

Criterion Measures: Written students schedules developed mutually by students and project staff which include, at a minimum, a schedule of courses to take; educational objectives to attain; choice of training institutions or apprenticeship programs; and pertinent work-study or volunteer services experiences in the community will be the instruments used to measure the extent to which this objective was achieved.

Evaluation Criteria: The written schedules outlining student schedules will be completed by (1) 60% of those tenth graders served by the program; (2) 80% of those eleventh graders served by the program; and (3) 90% of those twelfth graders served by the program. The schedules will have been reviewed by program counselors for appropriateness and feasibility, upon completion by students. The objective will be considered to have bean met if, for each student, the plans are rated by the program counselor as being increasingly more logical and consistent, on a 5-point rating scale, each time the student completes or revises the document.

Objective 5.6.2-- Those students served through the project who, during the course of instruction in Career Exploration, indicate an interest in a specific occupation, or occupational cluster will demonstrate an increase in their level of ability to demonstrate career consciousness.

Operational Definition: "Career Consciousness" as the term is used here refers to the ability to make tentative career choices which are consistent with (1) measured ability; (2) past achievements; (3) expressed and measured interests; (4) measured physical abilities; and (5) expressed values.

Those students who express interest in a given occupation will, in writing and orally, review with a project staff member his self-estimates (as recorded on a specially-designed instrument) of the extent to which the tentative career choice is consistent with the personal attributes, achievements, and values referred to above.

Criterion Measures: The self-rating instrument used to measure this objective is the Career Investigations Inventory, designed for this program.

Evaluation Criteria: When provisional career choices are rated by students and a staff member as being consistent or not consistent with the students' personal variables, the objective will be considered to have been met when there is a matched-pair agreement of 70% or greater between the student and staff ratings for ratings for all those tentative career choices analyzed by the student and staff members.

Objective S.6.3-- Students, upon completion of the program, will engage in career-related post-school activities.

Operational Definition: Those students who were in their senior year during the term of the project and who were enrolled at least half-time in the program will upon graduation: (1) enter a vocational or technical school offering appropriate training experiences for the occupation of their choice; (2) enter a two-year program at a junior college offering similar appropriate experiences; (3) enter a four-year college or university; (4) qualify for training in an apprenticeship program; or (5) enter the job market with an employable skill.

Criterion Measures: The number of students in the target group (graduating seniors) who describe in writing at the conclusion of the year their future plans, vocational and/or educational, will represent the standard by which attainment of this objective is measured.

Evaluation Criteria: The objective will be considered to have been met if all those students describing their plans in writing stipulate their intention to follow one of the post-school activities listed above, and if a project staff member indicates by checking that the written student plan is appropriate, reasonable, and possible.

Junior High Component

Program Development Objectives (1.0)

Objective J.1.1.-- Courses of instruction developed around topics such as, "the world of work," "occupational clusters," or "specific careers," will be developed for junior high school students.

Operational Definition: Either, or both, (1) a survey course covering the "career clusters" or (2) a series of mini-courses will be developed during the summer, 1972 by teams of persons. Included on the teams will be project staff, students, appropriate school system personnel and others (such as, parents and representatives of local business and industry). The program developed will be organized in such fashion that it can be taught in either one semester or one trimester.

Criterion Measures: Documentary records maintained by program development leaders designed to record the persons participating in course development, the "flow of events" in development, and similar information will document the processes engaged in in meeting the objective.

Evaluation Criteria: The objective will be considered as having been met when, as a result of the teams' efforts, the courses are produced in written form. The process records maintained will indicate that the materials were produced by the cooperative efforts of persons in the categories specified above.

Objective 1.1.2. The "career cluster" courses developed for the program will be implemented into the program of the two junior high schools in the school system during the 1972-73 school year.

Operational Definition: During the 1972-73 school year, (1) the "career" courses will be listed in the course catalogs or circulated on a written announcement, and they will be offered to junior high school students on the same basis as other elective courses; (2) junior high school teachers will include selected units or topics from the career instruction materials in their regular instructional program during the year.

Criterion Measures: (1) A copy of the written schedule of courses offered in the junior high schools, or a special announcement in writing indicating the availability of the courses during the school year; and (2) a documentary record of the number of teachers who included instruction from the career courses, the specific units or topics included, and the instructional outcomes will be the criteria by which attainment of this objective is measured.

Evaluation Criteria: The objective will be considered as having been met if: (1) the courses were offered to junior high students as specified above; and (2) at least 75 percent of the junior high school classroom teachers used at least one unit or topic developed for the program in their regular program.

Career Knowledge Objectives (2.0)

Objective J.2.1-- Junior high school students enrolled in the program will exhibit an increased level of knowledge concerning selected aspects of occupations.

Operational Definition: Those junior high students who receive instruction in the career education courses developed through the project will display a significant increase in their level of knowledge concerning (1) education required; (2) associated physical activity; (3) potential income level; and (4) probable life style associated with selected occupations.

Criterion Measures: The increment in students' ability level, as specified above, will be measured by the administration, on a pre-test and post-test basis of the Picture Inventory of Occupational Knowledge, (Guerra, University of Missouri-Columbia).

Evaluation Criteria: Those junior high school students in the target population will attain a mean score on the post-test which is greater than their mean score on the pre-test to the extent that the difference will be significant at the .05 level of confidence, or less.

Attitude Toward School Objectives (3.0)

Objective J.3.1-- Junior high students enrolled in the career education courses will demonstrate a significantly more positive attitude toward school upon completion of the course.

Operational Definition: The mean score of the target students will increase significantly on a post-test of an instrument designed to measure students' attitudes toward school compared with their obtained mean scores on a pre-test administration of the instrument.

Criterion Measures: The instrument used on a pre- and post-test basis to measure this objective is the Attitude Toward School Scale, developed especially for this program.

Evaluation Criteria: An increase significant to at least the .05 level of confidence on the post-test administration of the Attitude Toward School Scale, between the group mean score on the pre-test and the group mean score on the post-test will document the attainment of this objective.

Self-Conceptualization as a "Career Conscious" Individual Objectives (6.0)

Objective J.6.1-- Junior high students enrolled in the career-education course will exhibit an increase in measured maturity of attitudes salient to career decision-making.

Operational Definition: The mean level of target students' vocational maturity, as measured by an instrument designed for this purpose, will increase significantly on a post-test compared with the mean level on a pre-test, following instruction in the junior high career-education course(s).

Criterion Measures: Student change in level of vocational maturity will be measured by a pre- and post-test administration of the *Vocational Development Inventory*, (Crites, University of Iowa, 1966).

Evaluation Criteria: An increase significant to at least the .05 level of confidence on the post-test administration of the *Vocational Development Inventory* between the group mean score on the pre-test and the group mean score on the post-test will document the attainment of this objective.

Guidance and Counseling Component

Program Development Objectives (1.0)

Objective G.1.1-- Programs for the Senior High and Junior High Components of the project developed around group counseling concepts and procedures will be produced.

Operational Definition: Through the combined efforts of teams including project counselors and other staff, students, and other professional staff, a program organized around counseling procedures will be developed.

Criterion Measures: Criterion measures will consist of documentary records maintained by the project which record significant dates and critical events related to program development.

Evaluation Criteria: The objective will be considered to have been met by the production of a written course, including a guide, outline, or similar documentation.

Additional documentation will be supplied by the completion of the Curriculum Review Inventory by those staff engaged in operating the program.

Objective G.1.2-- A career counseling program will be developed for the junior high schools.

Operational Definition: A program related to career counseling and guidance appropriate for the junior high school level will be developed cooperatively by project and district counseling staff. Operationally, it will include activities such as testing, group and individual guidance, group and individual counseling, centered around careers and the world of work.

Criterion Measures: Criterion measures will consist of documentary records maintained by the project which record significant dates and critical events related to program development.

Evaluation Criteria: Attainment of the objective will be noted by the production in writing of a program outline including: a description of the program, suggestions for implementation, and a schedule for implementation.

Objective G.1.3-- A program for students of the Alternative School within the Senior High School Component, organized around group and individual counseling procedures and techniques, will be developed.

Operational Definition: A program for the Alternative School, termed "Group and Student Affairs," will be developed and implemented. Operationally, it will include such counseling activities as: career counseling, group relations, testing, goal setting, home visitations, and other elements.

Criterion Measures: Criterion measures will consist of documentary records maintained by the project which record significant dates and critical events related to program development.

Evaluation Criteria: The objective will be considered to have been met by the production of a written course, including a guide, outline, or similar documentation.

Objective G.1.4-- The counseling programs for the Junior High and Senior High Components described in the preceding objectives will be implemented in the junior high schools and the Alternative School during the 1972-73 school year.

Operational Definition: The program for the junior high schools will be built into the regular curriculum for the seventh and eighth grades. The "Group and Student Affairs Program" will be a regularly-scheduled course within the Alternative School, in which all students are enrolled.

Criterion Measures: For the junior high schools, the listing of programs as courses available for student enrollment in the Course Catalogs will document attainment of the objective.

For the Alternative School, the acknowledgment by staff that the program was offered and the completion of the Curriculum Review Inventory by those staff engaged in operating the program will document attainment of the objective.

Evaluation Criteria: The objective of implementing the program will be considered to have been met if the courses described above are offered to students and students enrolled in the program. Furthermore, implementation will be considered to have occurred if staff conducting the programs complete documentary records indicating that activities defined for the program were conducted.

Career Knowledge Objectives (2.0)

Objective G.2.1-- Junior high school students enrolled in courses developed through this program will demonstrate an increase in the level of knowledge they exhibit regarding pertinent aspects of a selected variety of occupations, which represent basic occupational clusters.

Operational Definition: The mean level of knowledge exhibited by students toward aspects of selected occupations will increase to a statistically significant extent. These aspects include (1) educational requirements; (2) working conditions; (3) economic reward; (4) style of living; and (5) social consequences, which are associated with various types of careers.

Criterion Measures: Change scores will be analyzed for students' performance on the instrument, Picture Inventory of Occupational Knowledge (Guerra), University of Missouri, Columbia).

Evaluation Criteria: The mean score of the group on the post-test will be greater than the mean score on the pre-test, to at least the .05 level of confidence, or less.

Attitude Toward School Objectives (3.0)

Objective G.3.1— Secondary students enrolled in the Alternative School will display a decrease in their stated number of problems related to school.

Operational Definition: Those students enrolled in the Alternative School will list significantly fewer problems on a post-test administration of an instrument designed to measure personal problems associated with school, compared with the number of problems they list on a pre-test administration of the instrument.

Criterion Measures: The instrument used to measure the number of student problems will be the subsections, "Adjustment to School Work," and "Curriculum and Teaching Procedures," on the *Mooney Problem Check List*.

Evaluation Criteria: The mean number of problems listed by students on the pre-test of the *Check List* near the beginning of the year and the post-test administered shortly after mid-year will decrease to an extent which will be measurably significant at the .05 level of confidence, or less.

Self-Conceptualization Objectives (6.0)

Objective G.6.1-- Students enrolled in the Alternative School will exhibit a significant, positive increase in their measured level of self-concept.

Operational Definition: Students will exhibit significant positive gains in their mean level of self-concept, as measured by their scores on a pre- and post-test of an instrument designed to measure the self-concept of secondary students.

Criterion Measures: The criterion used to measure accomplishment of this objective will be the mean scores of students on a pre- and post-test administration of the Self-Esteem Inventory (Coopersmith).

Evaluation Criteria: The mean self-concept score for Alternative School students on the post-test administration of the Self-Esteem Inventory administered near the close of the year will increase over the mean score for the group on the pre-test administered near the beginning of the year to an extent measurably significant at the .05 level of confidence, or less.

Objective G.6.2-- Students served through the Senior High Component of the program will display a significant reduction in their indicated number of personal problems.

Operational Definition: Students enrolled in the Alternative School will list significantly fewer personal problems on a post-test administration of an appropriate instrument, compared with the number of problems they list, on the average, on the pre-test administration of the instrument.

Criterion Measures: Criterion measures for this objective consist of the mean number of personal problems for the group on the pre- and post-tests administration of the 11 scales comprising the Mooney Problem Check List. These scales are: Health & Physical Development; Finances, Living Conditions, Employment; Social and Recreational Activities; Courtship, Sex and Marriage; Social-Psychological Relations; Personal-Psychological Relations; Morals and Religion; Home and Family; Future: Vocational and Educational; Adjustment to School Work; and Curriculum and Teaching Procedures.

Evaluation Criteria: The mean number of problems across all scales of the Check List listed by students on the post-test will be less than the mean number of problems listed on the pre-test to the .05 level of significance, or less.

APPENDIX 2

ALTERNATIVE HIGH SCHOOL
COURSE DESCRIPTIONS
FALL, 1972 SEMESTER

ENGLISH DEPARTMENT:

CREATIVE WRITING: POETRY AND PROSE
½ credit per semester

Reading and discussion of writings of the class; exploring new ways of perceiving our experiences and the experiences of other writers. Guest writers and poets; field trips to poetry readings; films. Writing and producing the magazine, "New Expectations." Possible areas of study: Indian tribal Poetry, the work of Blake, Kenneth Patchen and Rilke, also parables.

Teacher: Marty Ehrlich

CREATIVE WRITING: POETRY AND PROSE
½ credit per semester

Students will write for each class. Each student will prepare an individual creative project--such as interviews for a booklet on family's geneology, a booklet of poetry, or a daily journal. Emphasis is on being able to use writing as a creative outlet.

Teacher: Ann Scharff

INDIVIDUALIZED READING: TUTORING READING
½ credit per semester

The course will be offered in three areas of instruction: Individual study; teaching apprenticeship at Delmar-Harvard; and emer short term instruction in basic communication skills. This will include reading comprehension and writing development, through report writing, textbook comprehension and use of study guides for unit tests in related reading courses.

Teacher: Dolores Katz

COMMUNICATIONS I.
½ credit per semeqter (May also be taken for Social Studies Credit. Must be arranged with instructor at beginning of semester)

This course is designed to utilize group dynamics in order to develop insights into each student's self-awareness, personal growth, and interpersonal communication skills. Included will be listening skills, nonverbal messages, behavior patterns, the identity crisis, the process of growth, defense mechanisms, dealing with our emotions, games people play, etc.

Teacher: Lucy Dye

COMMUNICATIONS IV.
½ credit per semester

Pre-requisite: Communications I, II, III. Course will be a continuation of study in the areas described above. See Lucy for further information.

Teacher: Lucy Dye

BASIC COMPOSITION
½ credit per semester

Course is designed to familiarize students with the necessary mechanics of formal writing. Emphasis on thesis writing, research paper techniques, precis writing. An intensive effort will be made in the areas of: sentence structure, paragraphing, and punctuation.

Teacher: Jim Harrod

AFRO-AMERICAN LITERATURE
½ credit per semester

Class will study important Black Literature (fiction, essays, poetry, drama, debates) and will express the understanding of that literature orally and in written composition. Students will be able to analyze and read critically, materials placed before them in order to form independent opinions. Texts: James Emanuel, Dark Symphony. Included: precis writing, films, film strips, recordings.

Teacher: Jim Harrod

SURVIVAL ENGLISH ½ credit per semester

Course designed to emphasize practical and correct usage in the everyday world. For those who want to improve their speaking and writing skills.

Teacher: Jim Harrod

LIBRARY SCIENCE: ½ credit, 4th quarter

Course to be arranged with the assistance of a qualified librarian and the U. City Library. Basic principles and practice in cataloguing, reference; librarianship as a career.

CONTEMPORARY NOVELS ½ credit per semester

A discussion-oriented course. Readings will be selected by students and teacher. Expectations will include: completions of readings assigned, attendance agreements, independent project of your choice, individual conferences. Novels which may be included are: Kurt Vonnegut: Cat's Cradle, Slaughterhouse Five. Kafka: The Trial. Hermann Hesse: Siddhartha.

Teacher: Elliot Goldberg
Webster College

RELIGIONS I. ½ credit per semester (May also be taken for Social Studies credit if arranged with instructor)

The beginnings and development of the major religions of the world; religion and society; religion as a part of life. Readings, guest speakers, films, recordings, field trips to temples, churches, other places of worship.

Teachers: Mary Schatzkamer, Glenn Schowengerdt
David Landesman

RELIGIONS II. ½ credit per semester (May also be taken for Social Studies credit if arranged with instructor at beginning of semester.)

Independent Study. Pre-requisite: Religions I, and permission of the instructor.

Teacher: Mary Schatzkamer

PHILOSOPHY II. ½ credit per semester (May also be taken for Social Studies credit if arranged with instructor at beginning of semester.)

Independent study. Pre-requisite Philosophy I, and permission of the instructor.

Teacher: Mary Schatzkamer

DRAMA ½ credit per semester (May also be taken for Fine Arts Credit.)

Drama games, including improvisations, pantomimes, role playing, and drama exercises.

SOCIAL STUDIES DEPARTMENT

URBAN AFFAIRS** ½ credit per semester U.S. History Credit

American cities past and present, life in the city, social problems of urban America, ecology of the city, city government. The failure of our cities. What can we do about poverty, crime, and slums?

Teacher: Jim Young

LIFE CAREER DEVELOPMENT ½ credit per semester Social studies or Practical Arts Credit

Employment during the semester. This course is intended to provide a sound basis for a career choice through: (1) an appraisal of individual aptitudes, abilities, and interests in light of the future occupational outlook. (2) facilitating career conferences with successful practitioners in whatever fields may interest the student and (3) general knowledge about the world of work such as employee-employer relationships, organized labor, etc.

Teacher: Jim Young

LIFE CAREER GUIDANCE

Both individual and group guidance will be provided for all students. This is to be available through the counseling sessions in your student affairs class.

LIFE CAREER EXPLORATION ½ credit per semester

This is an extension of the life career development course, where we will try to provide a sound basis for a career choice through meaningful planned observation of and participation in work activities by the student in accordance with his or her individual aptitudes, abilities, and interests. Class attendance is not required. Students will be placed in jobs throughout the community. Release time from school will be available. Pay may or may not be available since the participation of the student will not require his meeting the production demands of a regular employee.

Pre-requisite: Open to all students that are enrolled in or doing independent study in the Life Career Development class.

Teacher: Jim Young

STUDENT ACQUIRED JOBS AND INDEPENDENT STUDY ½ credit per semester

Students may also participate in the Life Career Program by getting their own job after school and/or weekend jobs providing that: (1) job and objectives are registered with teacher, (2) students work a minimum of 10 hours per week, and (3) he or she completes all related assignments on an independent study basis.

Teacher: Jim Young

COMMUNICATIONS I. AND IV. ½ credit per semester

See course descriptions under ENGLISH DEPARTMENT.

CHILD DEVELOPMENT

½ credit per semester (Practical Arts credit also if arranged with instructor)

The person from -1 to +6. Conception, prenatal development, birth. Intellectual, emotional, physical, and social development of infant and child. Demonstration by nurses, medical students, child psychologists, interviews with new parents, observation of infants, laboratory experiences in day care centers, visiting pre-schools, films, field trips. The importance of fathers, mothers and grandparents in the child's life.

Teachers: Ralph Colpitz, Michael Pordy (St. Louis U. Med Students)
Mary Schatzkamer, Carolyn Lloyd

WOMEN'S STUDIES

½ credit (Meets 2 hours per week, all semester long)

For women only. Feminist theory and the history of the women's movement. Women in literature, film, and their use by the mass media. Sexuality and the psychology of women. Alternative life styles. Interests will help determine the exact curriculum.

Teacher: Judy Raker
(Washington U.)

CHINESE HISTORY

½ credit

High spots of China's long recorded history. Modern developments of the 20th Century.

Teacher: Mary Shieh

UNDERSTANDING CHINA II.

½ credit

An extension of 1st semester course. Chinese social and family customs, modes of living, industries, moral values, and life objectives. Political systems and educational systems.

Teacher: Mary Shieh

PSYCHOLOGY OF LEARNING

½ credit (meets 4 hours weekly for 3rd quarter)

Most of our behavior is the result of "learning". How do we learn? Who can learn what? Does "practice make perfect"? What do tests test? What is known about individual differences, intelligence, motivation, rewards and punishment, forgetting, problem-solving, creative imagination.

Teacher: Mary Schatzkamer

SCHOOLS TODAY

½ credit (meets 4 hours weekly for 4th quarter)
Pre-requisite: Psychology of Learning or permission of teacher.

A field trip course. Observation of schools, public, private, city and county, alternative and other. What do we learn in schools today? How do the theories of Holt, Kozol, Kohl, Herndon, Illich, relate to our observations?

TECHNIQUES AND PRACTICAL EXPERIENCES IN GROUP COUNSELING I.

½ credit

Basic concepts of group dynamics. Listening skills, deflection and relection techniques, role playing, etc. Development of skills, sincerity and maturity will enable you to work with peers in helping relationships.

TECHNIQUES AND PRACTICAL EXPERIENCES IN GROUP COUNSELING II.

½ credit

Pre-requisite: Group Counseling I. - 1st semester.

Continuation and further refinement of skills learned in Group Counseling I. with the addition of more extensive opportunity for helping others and the addition of academic content within the Alternative School.

Teachers: Dan Sullivan and Dave Littman

U. S. HISTORY

½ credit U. S. History credit

Not a chronological treatment. Examination of dominant themes such as centralism in government, urbanism, military-industralism, etc. Also dominant individuals such as Hoover, Roosevelt, Norman Thomas, W.E.B.DuBois, Harry Truman, Dr. Martin Luther King, The Kennedys and others. Inquiry methods, use of the library and field trips.

Teacher: Dan Sullivan

SOCIOLOGY

½ credit

Introduction to sociology as a behavioral, "living", science. Goals: identify and practice techniques of acquiring and treating sociological data. Questionnaires, surveys, etc. (2) to become familiar with the various theories and (3) examine social problems from a sociological perspective--such as school dropouts, V.D. rates, crime, loneliness, mental illness.

Teacher: Dan Sullivan

MENTAL HEALTH AND MENTAL ILLNESS IN MODERN SOCIETY

½ credit (class will meet 4 hours weekly for 3rd quarter)

This course will examine the impact of various aspects of Western life which may contribute to the mental health or illness of members of a society. Some anthropological contrasts will be made. Focus will be on a consideration of alternatives leading to a "healthier emotional life." Impact of such things as the educational system, media, family life, the pace of life will be examined.

Teachers: David Littman and Phoebe Cirio

BIOLOGICAL, CULTURAL AND SOCIAL AND SOCIAL ASPECTS OF HUMAN SEXUALITY

½ credit (class will meet 4 hours weekly for the 4th quarter)

Recommended pre-requisite: Mental Health and Mental Illness-3rd quarter.

The focus is on developing an awareness of the impact of sexual attitudes and values on one's total self concept and image. Areas for study are the endocrine system, reproductive anatomy and physiology, cultural regulation of human reproductive behavior (Childhood, adolescence, adulthood), as well as marriage conception, contraception, pregnancy and birth and abortion.

Teacher: Dave Littman

MATH DEPARTMENT

GENERAL MATH 1-2 ½ credit per semester

This course is restricted to, and to serve the needs of, students who have not met minimum state math requirements. Stress will be placed on competence in operations on whole numbers and positive fractions and various applications of percent during the 1st semester. During the 2nd semester, topics are expected to include introduction to algebraic symbols, solutions to 1 or 2 step equations, geometric measures including area and volume, business or consumer applications, work in non-decimal systems, and properties on non-negative rational numbers.

Teacher: Larry Weisberg

PRE-ALGEBRA 1-2 ½ credit per semester

This course designed for students who have an interest beyond basic arithmetic, that is, students who wish to prepare for and be introduced to simple algebra. During the 1st semester, a certain amount of review of basic skills will be followed by operations on integers and positive and negative fractions. The 2nd semester will include set notation and language, properties of rational numbers, and solutions of linear equations and inequalities in one variable.

Teacher: Larry Weisberg

ALGEBRA 1-2 ½ credit per semester

This is a two semester course which is pre-requisite to all math courses which follow in the publication. Topics in 1st semester include algebraic and set notation and language, operations with integers, properties of set of rationals, solutions of linear equations and inequalities in one variable. 2nd semester topics include operations with polynominals, introduction to functions, solutions of systems of linear equations and inequalities, exponents, radicals, solution of quadratics, and properties of set of real numbers.

Teacher: Larry Weisberg

GEOMETRY 1-2 ½ credit per semester

Topics studied first-semester include set relationships, induction and deduction, angle relationships, perpendicular lines and planes, parallel lines and planes, congruent triangles in quadrilaterals, inequalities for triangles. Second-semester topics include similar polygons similar right triangles, the Pythagorean theorem, constructions and logic, coordinate geometry, areas of polygons and circles, areas and volumes of solids. All topics will relate plane and space geometry to an extent. Mathematical and geometric proof is emphasized throughout the course. A full years credit in Geometry is a pre-requisite to all advanced courses in mathematics.

Teacher: Larry Weisberg

U. S. HISTORY:** THE SUPREME COURT ½ credit (meets 4 hours a week-3rd quarter)

An examination of functions and purposes of the Supreme Court. Historical review of major landmark cases and their impact on life in America today. Freedom of speech, assembly, search and seizure, protest rights and commerce.

Teacher: Dave Littman

U. S. HISTORY:** FOREIGN POLICY ½ credit (meets 4 hours weekly, 4th quarter)

An examination of relationships between U. S. and the rest of the world as a result of foreign policy decisions made by presidents, state department, advisors, and congress. Focus on World War II to the present, including Berlin, Middle East, Korea, Southeast Asia, etc.

Teacher: Dave Littman

U. S. HISTORY:** INDEPENDENT STUDY: SUPERVISED RESEARCH ON LEWIS AND CLARK

½ credit (Time to be arranged)
See Jan Eigner

An in-depth perspective--1806. Research tasks; surveying Reader's Guide, tracing of 1806 Birth, Marriage, and Death records, reading microfilm of old newspapers at downtown library.

Teacher: Joyce Benasezk

AFRO-AMERICAN HISTORY** ½ credit

Resistance and revolution in America. The Civil Rights Movement. Black nationalism. Black Art. Basic text will be Black Dialogues in Afro-American History.

Teacher: Faith Foster

RELIGIONS I. AND II. ¼ credit (See ENGLISH course description above)

PHILOSOPHY II. ½ credit (See ENGLISH course description above)

PEACE STUDIES ½ credit (Class meets 4 hours weekly - 3rd quarter)

Investigation of alternatives to war as a means of settling conflict. The social, economic, political and psychological reasons for war. Investigation and evaluation of organizations dedicated to peace. Assessment by the students of their own attitudes relating to peace. Cooperating community groups: The Peace Center, the St. Louis University Peace Institute.

Teacher: Judy Glaessner
President, WILPF

SCIENCE DEPARTMENT

ORGANIC GARDENING

¼ or ½ credit depending on time involvement
(Also Practical Arts credit if arranged with teacher at beginning of semester)

This course is both a reading and practically oriented course. The culmination of inquiry efforts is the garden with a variety of vegetables and flowers. Areas of consideration: What is organic gardening, humus, compost, mulch? Importance of soil pH, preparation of soil, selecting a site, controlling pests, what to plant, when and how.

Teacher: Dave Littman

ECOLOGY

½ credit

Air pollution, population control, solid waste disposal and pesticides are the major areas of concern. Activities will include student reports, discussion groups, field trips, audio visual presentations.

Teacher: Betty Buchanan

BIOLOGY

½ credit

This course will discuss fundamental aspects of life. DNA, protein and enzyme synthesis under genetic control, chromosome structure and replication, and differentiation. Basic principles of heredity, Darwinism and trends in the history of science will be examined. Class investigations will include working with plant growth substances to examine the mechanisms of flowering, fruiting, leaf abscission and phototropism.

Teacher: Tim Lorenz

GENERAL SCIENCE

½ credit

This course will cover a broad range of topics with emphasis on developing unified approaches in problem solving. Sample topics include the properties of water, simple explanations for age old questions: why is the sky blue? What causes sunsets, and why does ice float? A physical basis for color will be discussed. Simple chemistry will be introduced and common household plant and animal substances will be discussed on the basis of their chemical makeup. The main purpose of the course is to synthesize basic problem-solving approaches of physics, chemistry and biology.

Teacher: Tim Lorenz

GENERAL SCIENCE LABORATORY

½ credit

This course will use labs and discussions to illustrate the properties of matter. Separations, extractions, synthesis and qualitative analysis are some of the experimental procedures that will be used. Equilibrium properties, fermentation and the isolation of biological substances will be studied. Emphasis will be placed on the relationship of chemical properties to biology.

Teacher: Tim Lorenz

DRUGS AND THEIR USES

½ credit

The study of the physical properties of drugs and their effect on the human metabolism. Activities include making of a film to illustrate uses and properties of drugs.

Teachers: St. Louis University Medical Students

PRACTICAL ARTS

ENVIRONMENTAL DESIGN ¼ credit (Class meets 2 hours weekly for 2nd semester)

An introduction to spatial awareness--or "Do Walls Get In Your Way"? This course will deal with the architecture, sociology and psychology of physical environments. The end-product being actual construction of a particular environment. Included will be describing fantasy environments, introduction to architectural design, field trips, evaluation of, revision of a particular space already existing.

Teacher: Janet Hurwitz

ARCHITECTURAL DRAFTING ¼ or ½ credit to be arranged with instructor

The study of the means of communicating, through lines and symbols, information about building. Learning activities include the development of preliminary sketches, plans, elevations, sections, and detail drawings and the study of arch, design, model building, etc.

Teacher: Jim Young

CLOTHING CONSTRUCTION ¼ or ½ credit

Fashion and style; line, design, color. Fabric and pattern selection. Fitting, pattern alteration, flat pattern design. Layout, cutting, marking. Construction techniques including: darts, seams, seam finishes, plackets, zippers, yokes, sleeves, cuffs, pockets, collars and buttonholes, etc. Occupations and careers in clothing construction. Requirements include two finished garments.

Teacher: Carolyn Lloyd

CHILD DEVELOPMENT **½ credit**

See Social Studies for Description

COOKING ½ credit

Course will emphasize cooking techniques and skills in foreign foods, yeast breads, desserts, natural foods. Students will be given the opportunity to plan and prepare complete menus. Needs and interests of the students will help determine other areas to be included.

Teacher: Jean Reinke

OFFICE PRACTICE ½ credit

This course will include basic skills in typing, filing and office procedures. In order to be enrolled in this course each student must work in the office 3 hours a week. (Total time: 2 hours in class, 3 hours in office).

Teacher: Faith Foster

GARDENING ¼ or ½ credit

See SCIENCE for course description.

FINE ARTS

CERAMICS: HANDBUILDING I AND II

½ unit of credit

This course will be for beginners or experienced mudmen. In it, people will learn the slab, coil, pinch methods of working with clay and also ceramic sculpture. Glazes are included.

Teacher: Jan Eigner

CERAMICS: WHEELWORK

½ credit

Learning to center clay, various hand and finger techniques for shaping and forming pots, learning to trim and decorate using ceramics tools. Also using metric scale to formulate glazes. IMPORTANT. Individual instruction for ½ hour during the indicated time schedule for the class will be given. Therefore the student is free to enroll in other 8:30-9:30 class. He will have to sign up for 3½ additional hours of wheel time per week in order to complete class assignments. Four pots per week will be required and schedule will be posted for sign-up to complete the requirement.

Teacher: Jan Eigner

PHOTOGRAPHY I AND II.

People taking this course will learn the basics of photography including the printing and developing of their own film. This course may be viewed from the artistic as well as technical standpoint.

Teacher: Jan Eigner

MUSIC THEORY

½ credit

An individualized course. Writing and making music, vocal and instrumental; ear training, basic harmony; practice in listening, composing, analyzing, improvising. Scales, intervals, triads, four-part harmony, keyboard exercises. Personal expression will be stressed in all aspects of the class.

Teachers: Mary Schatzkamer and Marty Ehrlich

PIANO

½ credit

Learn to sight read, improvise, understand the piano's capabilities, improved technique from whatever starting point, learn small repertoire of memorized pieces. Class is designed for maximum individual benefit and progress.

Teacher: Mary Schatzkamer

FINE ARTS STUDIO

½ credit

This is a basic art course that will emphasize aspects of composition and design. Found objects, still lifes, and the human skeleton will provide subject matter for work done in the studio. Materials to be used include pencil, charcoal, pen and ink, watercolor, tempera, pastel, and acrylics.

Teacher: Steve Plax

PUPPET THEATER

½ credit or 1 credit for two sessions

This class would be concerned with the study of hand puppets as a dramatic art form. Students would be involved in writing plays; designing and constructing puppets; building a portable puppet stage; designing and pointing scenery; studying movement and sould as means of expression; choreographing backstage operations; rehearsing and presenting puppet performances.

FINE ARTS (continued)

PUPPET THEATER (cont'd)

Two sessions: 9:30 to 10:30 and 10:30 to 11:30 daily. First hour: writing, rehearsing and performing plays. Second hour: building stage and designing the scenery. Students interested in constructing puppets could sign up for either session as this aspect can be performed on a more individual basis than other aspects. Preference in registration should go to those students interested in and capable of enrolling in both sessions for double credit. (Class size limited)

Teacher: Steve Plax

DRAWING AND MIXED MEDIA ½ credit

Art projects of student's choice as arranged with instructor.

Teacher: Tom Duncan

ASIAN MUSIC APPRECIATION ½ credit

An introductory course in Asian music, instruments, opera, etc. Especially to introduce Chinese music and instruments.

Teacher: Mary Shieh

CHORAL MUSIC ½ credit

Development of singing groups--duets, trios, quartets, etc. Part singing, reading music. Open to all.

Teacher: Betty Buchanan

COMMERCIAL ART ½ credit

This art course would encompass many of the technical aspects of commercial art, such as layouts, and general production in order to simulate, for the students, actual work conditions as an artist's apprentice outside of the conventional classroom environment.

Teacher: Dan Pearlmutter

SCANDINAVIAN FILMS ½ credit

This is a course at Washington U. taught by George Duluz. Each student will keep a journal of his feelings about the movies. Work of Ingmar Bergman will be viewed and discussed. If possible, local film makers will be invited to talk to us and show their movies.

Teacher: Marty Ehrlich

WEAVING AND SPINNING ½ credit (8 weeks at Craft Alliance beginning March 8-sign up through Jan Eigner)

Everything you ever wanted to know about textiles and weaving, design, batik, etc. Area and local experts.

DANCE ½ credit

Modern dance techniques with musical accompaniment by Marty Ehrlich. Some choreography, some films, and master classes.

Teachers: Jan Eigner, Paul Blanchard, Marty Ehrlich

HEALTH

HEALTH

½ credit

Diseases, drugs, first aid principles, sex education, human reproduction. Activities include student reports; discussion groups, field trips, audio-visual presentations and library resources.

Teacher: Betty Buchanan

DRUGS AND THEIR USES

½ credit

See course description under SCIENCE above. Consult the instructors; perhaps an arrangement can be made so HEALTH credit can be obtained for this course.

EMERGENCY FIRST AID

½ credit

This course will include first aid treatment, ambulance service and hospital emergency room activities.

Teachers: St. Louis University Medical Students

PHYSICAL EDUCATION

PHYSICAL EDUCATION

Credit dependent upon time in class.
Arrange with instructor.

Including individual and team sports.

Teachers: Lucy Dye and Jim Harrod

DANCE:

See course description in FINE ARTS above.

SAFETY

SAFETY

Meets high school graduation requirements: See teacher: Lucy Dye

ELECTIVES (Not listed in Other Departments)

ADVANCED SPANISH ¼ credit

Experience in Spanish for advanced students. Enrollment limited. Permission of instructor. (See Mary Schatzkamer.)

Teacher: Luis Clay, M.A.
Instructor in Spanish, U.M.S.L.
Director of summer program in Mexico

BEGINNING FRENCH ¼ credit

Teacher: Monique Deverell

ADVANCED FRENCH ¼ credit

Pre-requisite: mimimum of one year in French

Teacher: Monique Deverell

CHINESE ½ credit

Beginning, intermediate and advanced students will be instructed in daily conversation and writing.

Teacher: Mary Shieh

CALLIGRAPHY ½ credit

Chinese brush writing, the study of the writing system, basic structure of the charachters, short history of the language and the technique in writing characters. Students will be advised at the first class session concerning the supplies they are to provide.

Teacher: Mary Shieh

INDEPENDENT STUDY USING A COMMUNITY RESOURCE

Subject: open to contract within your field of major interest.
Credit: open ¼ to ? credit
Time: to be arranged
Teacher: See Jan Eigner. She will work with you to find a community resource person with expertise in your field of interest.

INTEREST GROUPS

Offerings to supplement your learning and interests. These groups are not necessarily designed for graduation credit, rather they were developed to answer needs that people have expressed.

INTEREST GROUPS (continued)

WALK-IN READING AND WRITING CLINIC Dolores Katz M.W.F.-11:30-12:30

A short term service for students who need study aids in the following areas: SAT exams, homework assignments, report writing, compositions, textbook readings. Study guides will be provided for textbook chapters, subject area exams. No attendance hassle. Come when you need help.

GAMES THAT PEOPLE ENJOY Dan Sullivan Times to be arranged.

Chess, checkers, and other board games.

DESIGN AND SEWING Susie Rutherford
Times to be arranged.

Emphasis on design techniques, sketching and period costumes. Construction of garments included to meet interests of people in group.

HORSEMANSHIP Bonnie Bohanon Saturday mornings

A study of the history of the horse, its contributions to civilization; its role in modern civilization; the types and breeds of horses; equipment used for specific purposes in horsemanship; and the fundamentals of horseback riding Western style. Field trips will be arranged as will actual horseback riding later in the Spring.

CONTRACT BRIDGE Joe DeWoody Daily-12:00-1:00

Fundamentals of bidding and playing.

SAT TUNE-UP Joe DeWoody Wednes.-2-4

Verbal and numerical categories will be studied including reading comprehension, questions dealing with analogies and numerical reasoning.

SCULPTURE Ann Rosenbloom
Times to be arranged.

Once a week visit to the sculpture department at Fontbonne College.

SKETCHING Leslie Schechter
Times available: M.-12:30 to 2:30
F.- 9:30 to 12:30

Drawing using ink, brushes, black and colored charcoal. Field trip and critique each week, occasional drawing from live model at Webster College.

CONTEMPORARY FOLK SINGING: SONGS OF PROTEST
Lorenz Wahlers W.F.-11:30-12:30

APPENDIX 3

DESCRIPTIVE DATA ON THE ALTERNATIVE HIGH SCHOOL STUDENT POPULATION

The design for the Alternative High School specified that a cross-section from the population of secondary students in the District would be enrolled. Given below in Table 1 is a descriptive summary of selected characteristics (grade level, sex, and race) for the Alternative High School students.

TABLE 1

Descriptive Summary of Alternative High School Population, Spring Semester, 1973

Grade Level	f	%	% Female	% Male	% Black
Grade 9	31	20.8	70.9	29.0	16.0
Grade 10	33	22.1	45.4	54.5	33.3
Grade 11	49	32.8	36.7	63.2	18.3
Grade 12	36	24.1	44.4	55.5	33.3
Total:	149	99.8			
Overall Percent:			48.0	52.0	24.6

It may be seen from the information above that there was a nearly equal distribution of males and females overall. There was a greater proportion of females in grade 9 and a greater proportion of males in grade 11. There was nearly 25 percent enrollment of Black students, overall, but this group was under-represented in grades 9 and 11, compared with grades 10 and 12.

The distribution of Alternative High School students among grades and by racial groups was compared with that for secondary students throughout the school system. The comparison is presented below in Table 2.

On a percentage basis, the Alternative School enrolled fewer ninth and tenth graders and more eleventh and twelfth graders than was represented in the total secondary school population. Furthermore, the differential between the proportion of Black and white students enrolled at the Alternative School and in the secondary schools as a whole was approximately 6 percent.

TABLE 2

Comparison of Alternative High School with Secondary Students, by Class and by Race

Grade	% District	% Alt.Schl.
9	27.9	20.8
10	28.2	22.1
11	25.2	32.8
12	19.0	24.1
	n = 1962	n = 149

Race, Grades 10-12

District		Alternative School	
% White	% Black	% White	% Black
66.0	33.0	73.0	27.0

The third analysis of the student population was conducted in order to estimate whether the Alternative School had enrolled students from among the most academically able or least academically able students in the general secondary school population. A random sample of 30 percent of the tenth and eleventh grade Alternative High School students was drawn, and school records were consulted in order to note the rank in class for each person in the sample. The data are presented in Table 3.

For the sophomores, the ranks ranged from 1 through 566. Represented in the random sample of Alternative School students were 7 from the upper half of the tenth grade class and 3 from the lower half.

For the juniors, the ranks ranged from 1 through 516. In the sample, there was an equal number from the upper and lower halves of the class.

TABLE 3

Rank in Class of a Thirty Percent Random Sample of Tenth and Eleventh Grade Alternative High School Students

Grade 10	Grade 11
Ranks	Ranks
1 of 566	56 of 516
1 " "	97 " "
61 " "	156 " "
90 " "	231 " "
189 " "	257 " "
204 " "	270 " "
219 " "	348 " "
344 " "	367 " "
535 " "	406 " "
	464 " "

From the data presented in this section, it may be noted that the student body for the Alternative High School was not proportional to the secondary student population in all respects. It was somewhat over-representative of high school juniors and seniors and academically able high school sophomores, and it was somewhat under-representative of Black students.

However, on the variables analyzed, the Alternative High School population appeared to be sufficiently representative to be considered cross-sectional. One of the selection criteria was that students selected for the school exhibit a negative attitude toward formal education.

APPENDIX 4

CURRICULUM REVIEW INVENTORY FOR SELECTED ALTERNATIVE SCHOOL COURSES

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EXHIBIT 1

CURRICULUM REVIEW INVENTORY

Course Title: Introduction to Behavioral Science

Instructor: Litman/Sullivan Student teacher--Al Hillard

Amt. Credit: 0.5 Social Studies

Meeting Schedule: *( ) Daily (x) Bi-Weekly ( ) Tri-Weekly ( ) Weekly*
( ) Other (Specify)

	Major Units or Topics	Major Student Activities
1.	Introduction to basic concepts in Behavioral Science	Fenton Inquiry text
2.	Indentify techniques of handling data	readings
3.	Introduction to Anthropology	seminar discussions
4.	Introduction to psychology	trip to Washington university for resources use of Museum of Science and Natural History
5.	Introduction to sociology	History
6.	Introduction to Poly Science	Research writing
7.		
8.		
9.		
10.		

No. Enrolled: 7

No. Completed: 5

No. Withdrawals: 2

Comments: (Outcomes for Students, etc.):

Repo *Prepared By:* D. J. Sullivan

Date 12/1/72

Exhibit 1 continued

CURRICULUM REVIEW INVENTORY

Course Title: Sociology of Corrections

Instructor: Dan Sullivan

Amt. Credit: 0.5 Social Studies

Meeting Schedule: ( ) *Daily* (x) *Bi-Weekly* ( ) *Tri-Weekly* ( ) *Weekly*
( ) *Other (Specify)*________

	Major Units or Topics	**Major Student Activities**
1.	Juvenile Justice, St. Louis, St. Louis Country	Identifying relationships of local and municipal correctional services.
2.	University City, State of Missouir	Inspecting these facilities and services first hand.
3.	Adult Justice St. Louis, St. Louis County	Interviewing social workers, detention workers and directiors, psychologists and psychiatrists, as well as others in the helping-custodial professions.
4.		Readings . Discussion
5.		Individual research, writing
6.		
7.		
8.		
9.		
10.		

No. Enrolled: 11

No. Completed: 10

No. Withdrawals: 1

Comments: (Outcomes for Students, etc.):

eport Prepared By: D. J. Sullivan

te: 12/1/72

0.

Exhibit 1 continued

CURRICULUM REVIEW INVENTORY

Course Title: Biology

Instructor: Betty Buchanan

Amt. Credit: ½ credit per semester

Meeting Schedule: *( ) Daily* *(X) Bi-Weekly* *( ) Tri-Weekly* *( ) Weekly*
( ) Other (Specify)

	Major Units or Topics	Major Student Activities
1.	Biological systems	Students reports
2.	Genetics	Discussion groups
3.	Evolution	Field trips
4.	Biological classifications	Audio-visual presentations
5.		Library resources
6.		
7.		
8.		
9.		
10.		

No. Enrolled: 15

No. Completed: approx. 15

No. Withdrawals:

Comments: (Outcomes for Students, etc.):

Report Prepared By:

Date: December 14, 1972

Exhibit 1 continued

CURRICULUM REVIEW INVENTORY

Course Title: Ecology

Instructor: Betty Buchanan

Amt. Credit: ½ credit

Meeting Schedule: ( ) Daily (x) Bi-Weekly ( ) Tri-Weekly ( ) Weekly
( ) Other (Specify)________

	Major Units or Topics	Major Student Activities
1.	Air pollution	Student reports
2.	Population control	Discussion groups
3.	Solid waste disposal	Field trips
4.	Pesticides	Audio-visual presentations
5.		The evaluation of a new ecological curriculum
6.		
7.		
8.		
9.		
10.		

No. Enrolled: 8

No. Completed: 6

No. Withdrawals: 0

Comments: (Outcomes for Students, etc.):

*Report Prepared By:*________

Date: December 14, 1972

Exhibit I continued

CURRICULUM REVIEW INVENTORY

Course Title: Biology

Instructor: Betty Buchanan

Amt. Credit: ½ credit per semester

Meeting Schedule: ( ) Daily (X) Bi-Weekly ( ) Tri-Weekly ( ) Weekly
( ) Other (Specify)

	Major Units or Topics	Major Student Activities
1.	Biological systems	Students reports
2.	Genetics	Discussion groups
3.	Evolution	Field trips
4.	Biological classifications	Audio-visual presentations
5.		Library resources
6.		
7.		
8.		
9.		
10.		

No. Enrolled: 15

No. Completed: approx. 15

No. Withdrawals:

Comments: (Outcomes for Students, etc.):

Report Prepared By:

Date: December 14, 1972

Exhibit 1 continued

CURRICULUM REVIEW INVENTORY

Course Title: Family Living

Instructor: David Littman, Carolyn Lloyd

Amt. Credit: ½ unit

Meeting Schedule: ( ) *Daily* (x) *Bi-Weekly* ( ) *Tri-Weekly* ( ) *Weekly*
( ) *Other (Specify)*

Major Units or Topics	Major Student Activities
1. Values	Participation in values strategies. Calss discussion
2. Communication	Class discussion
3. Resources	Field trip--Washington U. Library
4. Pre-school, elementary child-parent relationships	Class discussion
5. Parent-teenage relationships	Class discussion
6. Peer relationships	Class discussion
7. Drugs--Impact on family Relationships	Independent research, Report Writing.
8. Personality formation of children from broken homes	Class presentation. "
9. Birth Order and personality formation	"
10. Effect of personality formation of children of the cibbutz.	

No. Enrolled: 9

No. Completed: 9

No. Withdrawals:

Comments: (Outcomes for Students, etc.):

Report Prepared By: Carolyn Lloyd

Date:

Exhibit 1 continued

CURRICULUM REVIEW INVENTORY

Course Title: Housing and Interior Design (Independent Study)

Instructor: Carolyn Lloyd

Amt. Credit: ½ unit

Meeting Schedule: *( ) Daily* *(x) Bi-Weekly* *( ) Tri-Weekly* *( ) Weekly*
*( ) Other (Specify)*__________

	Major Units or Topics	Major Student Activities
1.	Family Housing Needs	Research--reading on housing design
2.	Design floor plan for hypothetical family	
3.	Draft floor plan	Study drafting techniques
4.	Selection of furniture	Reading--visit furniture stores--quality comparison
5.	Design Principles Color Harmonies	Reading--select and mount pictures illustrating principles of design and color harmonies
6.		
7.	Furniture Arrangement on floor plan	Reading--manipulation of scale furniture models
8.	Mock-up model for room design	Construction of model--selection of color scheme, carpet, walls, drapes, furniture styles
9.		
10.		

*No. Enrolled:*__________

*No. Completed:*__________

*No. Withdrawals:*__________

Comments: (Outcomes for Students, etc.):

Report Prepared By: Carolyn Lloyd

*Date:*__________

Exhibit I continued

CURRICULUM REVIEW INVENTORY

Course Title: Survival Mechanical Skills

Instructor: Dan Sullivan

Amt. Credit: 0.5 Practical Arts (Sponsor--Jim Young)

Meeting Schedule: ( ) *Daily* ( ) *Bi-Weekly* ( ) *Tri-Weekly* (x) *Weekly*
( ) *Other (Specify)*________

Major Units or Topics	Major Student Activities
1. Auto mechanics	tune ups, preventive maintenance
2. Appliance Repair	individual projects
3. Fixing things (lights, windows, doors, plumbing)	A.S. maintenance repair crew
4.	
5.	
6.	
7.	
8.	
9.	
10.	

No. Enrolled: 9

No. Completed: 8

No. Withdrawals: 1

Comments: (Outcomes for Students, etc.):

Report Prepared By: D. J. Sullivan

Date: 12/1/72

APPENDIX 5

A COMPARISON OF ATTENDANCE AT THE ALTERNATIVE SCHOOL WITH THE SENIOR HIGH SCHOOL

Data gathered in measurement of Objective 5.1.2 indicated that students at the Alternative High School demonstrated a marked decrease in number of days absent while in the Alternative School, compared with their previous attendance records. The question arose as to how attendance at the Alternative School compared with that at the District senior high school.

Attendance records are maintained in the School District and are calculated regularly in the form of an average daily attendance. The first comparison made, therefore, was to compare the average daily attendance at both schools. This was done by project staff. The data are presented in Table 1. It may be seen from the display that the average daily attendance for both schools was comparable in terms of the proportion of students upon which the reported figures were based.

The second comparison consisted of a statistical test for the significance of difference between the reported number of days absent for the Alternative High School and a sample of senior high school students for the 1972-73 school year. For this purpose, a random sample of 171 senior high school students was drawn and their reported number of days absent during the school year was compared with those of the Alternative School students. Descriptive data are presented in Table 2.

A t-test for uncorrelated means was applied to the data. The results of this analysis are presented below in Table 3.

TABLE 3

Significance of Difference (1-tailed test) Between Yearly Absences in 1972-73 of All Alternative School Students and a Stratified Random Sample of Senior High Students

Group	N	Mean	SD	SE	t	P
Alternative High School	171	22.77	26.83	2.34	+2.6	< .005
Senior High School	171	16.67	16.51			

This analysis indicated that, while the absent rate for Alternative School students was significantly smaller for that group, students at this school had a significantly greater number of absences than a representative sample of students from the senior high school.

TABLE 1

A Comparison Between the Average Daily Attendance in the Senior High School and the Alternative High School, 1972-73

Month	No. Days	No. Students Sr.High	No. Students Alt.H.S.	Average Daily Attendance	
				Sr.H.S.	Alt.H.S.
September	14	1560	119	1320.1	110.3
October	20	1565	119	1299.9	105.2
November	20	1560	119	1279.7	96.1
December	17	1541	119	1245.2	96.5
January	16.5	1526	119	1231.4	95.5
February	19	1447	119	1193.8	104.6
March	19	1446	119	1158.5	101.3
April	19	1444	119	1184	97.9
May	20	1436	119	1149.6	84.7
June	10.5	1416	119	1181.9	88.3

*NOTE: The data reported in this table were obtained through abstracting the attendance figures of the Alternative School students in Grades 10, 11, and 12 from the monthly attendance reports filed by senior high school staff.

The data indicate that the Alternative School population consistently comprised between 7 and 8 percent of the total population for grades 10 through 12. Furthermore, the A.D.A. of the Alternative School students was consistently between 7-8 percent of that for the senior high school.

TABLE 2

A Comparison of Absences, Alternative School and Senior High School, 1972-73

Step Intervals	Alt. School		Senior High	
	freq.	%	freq.	%
127-133	1	0.5	0	0.0
120-126	1	0.5	0	0.0
113-119	0	0.0	0	0.0
106-112	3	1.7	0	0.0
99-105	1	0.5	0	0.0
92-98	2	1.1	0	0.0
85-91	2	1.1	1	0.5
78-84	2	1.1	0	0.0
71-77	1	0.5	4	2.3
64-70	2	1.1	0	0.0
57-63	3	1.7	2	1.1
50-56	3	1.7	2	1.1
43-49	12	7.0	7	4.0
36-42	6	3.5	4	2.3
29-35	7	4.0	13	7.6
22-28	11	6.4	15	8.7
15-21	25	14.6	23	13.4
8-14	31	18.1	47	27.4
0-7	58	33.9	53	30.9
	Mean: 26.09		Mean: 19.63	
	Standard Deviation: 30.66		Standard Deviation: 18.74	